

TITLE OF INFORMATION COLLECTION:

Pretesting Survey on Usage and Functionality of Smoke Alarms and Carbon Monoxide Alarms in Households Through the Use of Cognitive Interviews

PURPOSE:

The purpose of this study is to test a survey instrument and its accompanying communication materials for an upcoming study being conducted by the U.S. Consumer Product Safety Commission (CPSC). CPSC has contracted EurekaFacts to conduct a nationwide assessment of the functionality of residential smoke and carbon monoxide (CO) alarms, as well as resident use and knowledge of smoke and CO alarms. This will require EurekaFacts to administer a nationwide survey (Appendix C, Volume II) on the usage and functionality of smoke alarms and carbon monoxide alarms in households (will be submitted for a separate OMB review). Results of the survey will inform CPSC recommendations to state/local jurisdictions related to codes, standards, and/or regulations of smoke and CO alarms and improve communication regarding the proper installation and maintenance of smoke and CO alarms for the general public. Before administering the survey, EurekaFacts is seeking OMB approval to test the instrument on a set of respondents through cognitive interviews.

The information gathered during this phase of the study will be used to revise the CPSC survey on the usage and functionality of smoke alarms and carbon monoxide alarms in households and its accompanying communication materials. Before administering the survey instrument, it is customary to check whether the communication materials and survey instrument are clear and understandable. After completing the questionnaire design, EurekaFacts plans to conduct testing sessions, referred to as cognitive interviewing, to ascertain the clarity and understandability of the survey and communication materials. The objective of cognitive interviewing is to provide an in-depth exploration of how respondents interpret and understand designed questions, response options, and concepts included in the survey to ensure that the survey measures intended constructs. The results of the cognitive interviewing will ensure that any questions that are misunderstood by respondents or that are difficult to answer are clarified before fielding the survey, and thus, increase the overall quality of survey data and the accuracy of the study results.

DESCRIPTION OF RESPONDENTS:

The recruitment objective is to identify 18 participants who will be willing to provide insight regarding their opinions and perceptions of a survey instrument and accompanying communication materials designed specifically for a future study. Eligible participants will include individuals who are 18 years or older and are considered head of the household. The main audiences will include: individuals who report having a smoke alarm that is not connected to a central alarm that may notify the police or fire department (Appendix A, Volume II), and individuals who do not have a smoke alarm installed (Appendix B, Volume II), or, if they do, their smoke alarm is connected to a central alarm. The contractor conducting the study will send e-mails (Appendices A – C, Volume I) to past study participants who may be or may know of eligible participants. Recruitment materials can be found in volume I.

Gifts or Payments:

Is an incentive (*e.g.*, money or reimbursement of expenses, token of appreciation) provided to participants? [X - \$50] Yes [] No

BURDEN HOURS

Category of Respondent	No. of Respondents	Participation Time	Burden
Cognitive Interview Participants	18	1.5 hrs.	27 hours
Totals	18		27 hours

FEDERAL COST: The estimated annual cost to the federal government is \$8,336.00.

Total estimated cost to the government for conducting the data collection is as follows:

Number of Participants	18
Total estimated cost of conducting the evaluation session	\$8,336.00
Cost per completed Participant	\$463.11

The estimate is based on the total cost of the awarded research contract, divided by the specified number of completed participants.

***2017 U.S. Consumer Product Safety Commission (CPSC)
Survey on Usage and Functionality of Smoke and CO Alarms
in Households***

OMB Submission Materials

Appendices

Volume I: Communication and Recruitment Materials

July 17, 2017

Table of Contents

Appendix A: Email Invitation to Participate in the Cognitive Interview Session.....	2
Appendix B: Landing Web Page/Intake Form.....	3
Appendix C: Intake Form Auto Response.....	4
Appendix D: Cognitive Interview Phone Screener.....	5
Appendix E: Cognitive Interview Confirmation Email.....	10
Appendix F: Cognitive Interview Consent Form.....	11
Appendix G: Thank You Email for Participating in Cognitive Interview.....	12

Appendix A: Email Invitation to Participate in the Cognitive Interview Session

<Date>

IF SENT AS E-MAIL - Subject: Invitation to Participate in a CPSC Research Study

Dear <insert name>,

I am contacting you from EurekaFacts, LLC, a market research company in Rockville, MD. We are conducting an important research study for the U.S. Consumer Product Safety Commission (CPSC).

Soon, we will begin a survey for CPSC about smoke and carbon monoxide alarms in people's homes. We are looking for people to participate in a confidential interview session to test questions that will be part of that survey. The purpose of the interview is to help us make sure that the questions we plan to ask in this survey are clear and understandable.

If you agree to participate, your interview session would take place at EurekaFacts, in downtown Rockville, and will last no more than 90 minutes. The interview session can be scheduled at your convenience. You will receive a \$50 gift card in appreciation for your participation.

If you are interested in participating in this study, please <fill out an intake form at: [<LINK>](#), or> call/email: <CONTACT PHONE>/<CONTACT EMAIL>. We look forward to communicating with you soon!

Thank you,

<NAME>

Field Services Coordinator

EurekaFacts, LLC

(240) 403-1645

(301) 610-0640 - fax

www.eurekafacts.com

Appendix B: Landing Web Page/Intake Form

Thank you for your interest in participating in this important study.

Soon, we will be conducting a survey for CPSC about smoke and carbon monoxide alarms in people's homes. We are looking for people to participate in a confidential interview session to test survey questions that will be part of the survey. The purpose of the interview is to help us make sure that the questions we plan to ask in the survey are clear and understandable. This interview will last about 90 minutes. Eligible participants will receive a \$50 gift card in appreciation for their participation.

If you are interested in participating, please complete the form below.

First name

Last name

Phone number

Email address

Appendix C: Intake Form Auto Response

<Date>

IF SENT AS E-MAIL - Subject: CPSC Research Study

Dear <NAME>,

Thank you for your interest in this important research effort! We are looking for people to participate in a confidential interview session to test survey questions that will be part of an upcoming survey. We will contact you shortly with more details regarding this study.

If you have any questions about this study, please contact EurekaFacts at: <Phone number> or <Email address>.

Thank you again for your willingness to participate in this important research effort.

Sincerely,

EurekaFacts

Appendix D: Cognitive Interview Phone Screener

Hello, my name is [NAME] from EurekaFacts, a survey research company in Rockville, MD. I am calling on behalf of the U.S. Consumer Product Safety Commission (CPSC).

May I speak with _____?

If unavailable,

Is there someone else we can speak with regarding household decisions?

If not at the moment,

When would be a convenient time to reach them?

If participant rescheduled, please fill out the following information:

Date

Time

Contact information

If refused,

Thank you for your time. Have a great day/evening.

If yes, or speaking

We are looking for people to participate in a confidential interview session at our office in downtown Rockville, MD. This interview will last about 90 minutes, and you will receive \$50 in appreciation for your participation. Soon we will be conducting a survey about smoke and carbon monoxide alarms in people's homes. The purpose of the interview is to help us make sure that the questions we plan to ask in this survey are clear and understandable. Would you be interested in participating in an interview at our offices in downtown Rockville, MD?

The interview is for research purposes only, and none of the answers you provide will be shared with or used by anyone else other than the EurekaFacts and CPSC research team. If you are interested, I would like to ask you a few questions to see if you're eligible to participate.

Screener

[Interviewer: Determine recruitment needs in advance. Record all responses. End screening at whatever point the participant gives a response that confirms that their group has already been sampled adequately. End screener script: *Based on the requirements of this study, we are not able to include you in the survey at this time.*]

1. What is your age?
 - a. Under 18 (**Terminate**)
 - b. 18-30
 - c. 31-40
 - d. 41-50
 - e. 51-60
 - f. 61-64
 - g. 65 +

TERMINATION LANGUAGE: IF UNDER 18: Is there an adult with whom we could speak?

IF NO: Thank you very much for your time. Unfortunately, you do not qualify for this particular study.

IF YES: Ask to speak with the adult and start from the beginning.

2. In the last 6 months, have you participated in any paid market research studies conducted by EurekaFacts?
 - a. Yes (**Terminate**)
 - b. No

TERMINATION LANGUAGE: Thank you very much for your time. Unfortunately, you do not qualify for this particular study.

3. Are you one of the heads of the household?
 - a. Yes (**Go to Q 4**)
 - b. No (**Go to Q 3A**)

3A. **IF NO:** Is there another person I may speak to who may be considered one of the heads of the household?

- a. Yes (**Start from beginning**)
- b. No (**Ask if possible to call back, and ask what time would be most convenient, then Terminate**)

TERMINATION LANGUAGE: We would like to speak with someone who is responsible for making decisions regarding the home. What would be the best day and time to reach them?

If participant rescheduled, please fill out the following information:

Date

Time

Contact information

4. Do you currently have any smoke alarms in your home? Please do not include any uninhabited outbuildings or apartment hallways.
 - a. Yes
 - b. No
 - c. Don't know (**ASK RESPONDENT TO INSPECT**)

Don't know: "If you don't mind, could you please take a quick look around your home to see if you have a smoke alarm?"

4A. Are any of your smoke alarms connected to a central alarm or security system that notifies the police or fire department?

[If needed: *What we mean by this is, if the smoke alarm detected smoke, it would automatically notify the police or fire department.*]

- a. Yes
 - b. No
 - c. Don't know **(GO TO Q 5)**
5. Has the police or fire department ever arrived at your residence for a fire- or smoke-related incident and informed you that they are responding to a notification they received from a central alarm or security system?
- a. Yes
 - b. No
 - c. Never had a fire- or smoke-related incident
6. Do you currently have any carbon monoxide (CO) alarms in your home? Please do not include any uninhabited outbuildings or apartment hallways.
- a. Yes
 - b. No
 - c. Don't know
- 6A. Are any of your carbon monoxide alarms connected to a central alarm or security system that notifies the police or fire department?
- [If needed: *What we mean by this is, if the carbon monoxide alarm detected carbon monoxide, it would automatically notify the police or fire department.*]
- a. Yes
 - b. No
 - c. Don't know **(GO TO Q 7)**
7. Has the police or fire department ever arrived at your residence for a carbon monoxide-related incident and informed you that they are responding to a notification they received from a central alarm or security system?
- a. Yes
 - b. No
 - c. Never had a carbon monoxide related incident

8. As I mentioned, these interviews will take place at the EurekaFacts' office located in downtown Rockville, MD. Are you willing to drive or commute to our location?
(PROVIDE MORE INFO IF NEEDED: 51 Monroe St., Plaza East 10; NEAR Rockville Town Center in Rockville, MD; Rockville Maryland Metro Station on the Red Line)
- a. Yes
 - b. No (**Terminate**)

TERMINATION LANGUAGE: Thank you very much for your time. Unfortunately, you must be present at our facilities to participate in this study. Have a nice day/evening.

9. ASK ONLY IF NOT OBVIOUS: Are you male or female?
- a. Male
 - b. Female

10. In this study, we will ask you to read several paragraphs and survey questions aloud. The reading materials will only be in English. Do you feel comfortable reading aloud, without assistance, during the interview?
- a. Yes
 - b. No (**Terminate**)

TERMINATION LANGUAGE: Thank you very much for your time. Unfortunately, you do not qualify for this particular study.

11. Are you Hispanic or Latino?
- a. Yes
 - b. No

12. What is your race? Select one or more.
- a. American Indian or Alaska Native
 - b. Asian
 - c. Black or African American
 - d. Native Hawaiian or Other Pacific Islander
 - e. White

13. In what type of home do you currently reside?
- a. Single-Family Detached Housing
 - b. Mobile/Other Manufactured Housing
 - c. Trailer/RV
 - d. Apartment/Condo
 - e. Single-Family Attached Housing (e.g. townhouse, rowhouse)
 - f. Other (Specify)_____
 - g. Refused

14. Which of the following best describes your level of education?
- a. Less than high school
 - b. Graduated high school, or high school equivalent (GED)
 - c. Trade school
 - d. Some college, no degree
 - e. Graduated college
 - f. Post graduate degree
 - g. Refused

Recruitment Note: Aim to get a relatively good mix of participants across all categories.

15. Which of the following categories best describes your household income?
- a. Less than \$25,000
 - b. \$25,000-\$49,999
 - c. \$50,000-\$99,999
 - d. \$100,000-\$149,999
 - e. \$150,000 or more
 - f. Refused

Recruitment Note: Aim to get a relatively good mix of participants from different socioeconomic backgrounds.

TERMINATION LANGUAGE: Thank you very much for your time. Unfortunately, you do not qualify for this particular study.

Closing: Thank you for answering these questions. You are eligible to participate in this research project. If you choose to participate in a 90-minute cognitive interview about the CPSC survey on smoke and CO alarms in your home, you will receive \$50 in appreciation for your participation.

16. Would you still like to participate?
- a. Yes **(Go to 16 A)**
 - b. No **(Go to 16 B)**

16A. **IF YES:** Thank you so much for your willingness to help us. We are looking to schedule interviews between <DATE> and <DATE>.

Please confirm your contact information.

Full name _____
Phone number _____
Email _____

16B. **IF NO:** Thank you for your time. Have a great day/evening.

Appendix E: Cognitive Interview Confirmation Email

<Date>

IF SENT AS E-MAIL - Subject: Confirmation of Your Participation in a CPSC Research Study

Hello Mr./Ms. <NAME>,

Thank you for agreeing to participate in the interview session for the U.S. Consumer Product Safety Commission (CPSC) smoke and carbon monoxide (CO) alarm usage survey. We will soon be conducting the survey nationwide. Before giving out this survey, CPSC and EurekaFacts need to receive feedback on the survey questions. Your participation in this interview session will help us make sure that the questions we ask in this survey are clear and understandable. This email is to confirm that you are scheduled to participate in the interview on <DATE> at <TIME>.

Please arrive at least 15 minutes before the start of the interview. The interview will last approximately 90 minutes, and you will be compensated \$50 in appreciation for your participation.

Please do not bring any children with you to the interview session because we do not have any way to accommodate young children. You must attend the interview to receive the \$50 compensation. You may not receive the compensation if you are late for the appointment.

The cognitive interview will be held at our facility:

Address: EurekaFacts, LLC
51 Monroe St. Plaza E-10 (Plaza level Suite 10)
Rockville, MD 20850

Map and Driving Directions: [Click Here](#)

Public Transportation:

- Take the Red line to the Rockville Metro Station.
- Take the covered pedestrian walkway to the other side of the street.
- The entrance to 51 Monroe St. is the building on the left, connected to the Rockville Metro Station by the covered walkway.

Participants will receive three hours of paid parking. Submit your parking ticket for validation on the first floor of the building. Upon arrival, please proceed to the plaza level, and ring the doorbell at Suite 10.

Please confirm your participation by responding to this email. If you have any questions, don't hesitate to call us at: (240) 403-4800 ext. <NUMBER>

Best regards,

<NAME>
Field Services Coordinator
EurekaFacts, LLC
(240) 403-1645
(301) 610-0640 - fax
www.eurekafacts.com

Appendix F: Cognitive Interview Consent Form

For Participation in Cognitive Interviewing
**Study Name: U.S. Consumer Product Safety Commission (CPSC) Survey on Usage and
Functionality of Smoke Alarms and Carbon Monoxide Alarms in Households**

About the study

Thank you for your interest in participating in the Smoke and Carbon Monoxide (CO) Alarms Survey. This consent form explains this research study. EurekaFacts developed a nationwide survey for the CPSC on household safety. The survey is very important and will help the CPSC improve the safety of U.S. homes. The purpose of this interview is to help ensure that the questions we ask in the survey are clear and understandable.

Research session

The interview should take no more than 90 minutes. During the interview, you will receive a printed copy of survey questions that you will be asked to answer verbally. The interviewer will ask open-ended questions to follow-up on why you selected each answer. Questions will focus on your understanding of the questions. You will also be asked whether you have any suggestions on how we might improve the questions.

Confidentiality

You will be assigned a unique identification number (ID), and your name will not be linked to your answers or comments. Your responses will be used for research purposes only, and will not be disclosed or used in identifiable form. The sessions will be audio-recorded and the recordings will be used only by the researchers conducting the study. No one else will hear the recordings. Project researchers may also observe the interview.

Potential risks

This research does not involve any foreseeable risks.

Voluntary participation

Your participation in this research study is completely voluntary. You may stop at any time, and you do not have to answer any questions you do not wish to answer.

By signing below, you agree to participate in this research study, and acknowledge that you have read and understood the information provided above. You will receive **\$50** after the interview in appreciation for your participation. We thank you for your voluntary participation, and ask you to sign the form below.

Print Name: _____

Signature: _____ Date: _____

Email address: _____

If you have any questions about this research study, please contact Ismail Nooraddini, the Project Manager, at 240-403-4800, extension 235, or at: NooraddiniI@eurekafacts.com.

Appendix G: Thank You Email for Participating in Cognitive Interview

<Date>

IF SENT AS E-MAIL - Subject: Thank you for your participation in the CPSC Research Study

Dear <NAME>,

On behalf of EurekaFacts, LLC, and the U.S. Consumer Product Safety Commission (CPSC), we would like to thank you for participating in the interview session for the CPSC survey on smoke and carbon monoxide (CO) alarm usage. Your assistance, combined with the input of other participants, was incredibly useful and informative. We greatly appreciate your taking the time to attend the interview to improve the content of the survey.

Again, thank you for your assistance.

Sincerely,

<NAME>

Field Services Coordinator

EurekaFacts, LLC

(240) 403-1645

(301) 610-0640 - fax

www.eurekafacts.com

***2017 U.S. Consumer Product Safety Commission (CPSC)
Survey on Usage and Functionality of Smoke and CO Alarms
in Households***

OMB Submission Materials

Appendices

Volume II: Protocols & Instrument

Table of Contents

Appendix A: Cognitive Interview Protocol (Alarm).....	3
Appendix B: Cognitive Interview Protocol (No Alarm).....	78
Appendix C: CPSC Survey on Usage and Functionality of Smoke Alarms and Carbon Monoxide Alarms in Hoursholds.....	122

The U.S. Consumer Product Safety
Commission (CPSC) Survey on Usage
and Functionality of Smoke Alarms and
Carbon Monoxide Alarms in Households
Cognitive Interview Protocol
Group: *Alarm*

Interviewer name: _____
Participant ID: _____
Date and Time: _____

The answers for questions 1 through 9 must be filled before the interview.

Ref #	Question/Prompt	Response
	Preliminary Information	
1	Name of interviewer	
2	Date	
3	Participant ID	
4	Age	
5	Participant's Gender (note: Do not ask participant)	☐ Male ☐ Female
6	Type of residence	☐ Single-Family Detached Home ☐ Mobile/Other Manufactured Home ☐ Trailer/RV ☐ Apartment/Condominium ☐ Single-Family Attached Housing (Townhouse, row house) ☐ Other Specify _____
7	Type of alarm(s) (note: Select all that apply)	☐ Smoke alarm(s) ☐ CO alarm(s) ☐ Central alarm ☐ No smoke or CO alarm
8	Connected to central alarm or security system	☐ Yes ☐ No
9	Special circumstances that may have affected the interview (note: Do not ask participant)	

INTERVIEWER'S INSTRUCTIONS: *The interviewer should not read the script word-for-word, but should be familiar enough with its contents to conduct the interview in a natural and conversational manner, paraphrasing or giving additional explanation, as appropriate. The protocol provides a list of suggested probes to ask and guidelines on which survey items need to be tested. However, the interview will require a flexible probing approach, with the selection of relevant probes or modifications to the suggested probe formulations, depending on the participant's think-aloud responses and answers to the survey items.*

Introduction:

Hello, my name is _____, and I work for EurekaFacts. It's nice to meet you. I would like to thank you very much for helping us out today.

Let me begin by explaining our goal and what you are going to be doing. We will soon be conducting a nationwide survey on household safety. The survey is very important and will help the U.S. Consumer Product Safety Commission or CPSC, to improve the safety of U.S. homes. Before we give out the survey, we would like feedback from participants regarding the survey questions and accompanying communication materials. The purpose of today's interview is to help us make sure that the questions we will be asking other household residents, and the accompanying communication materials, as part of a nationwide household safety survey, are clear and understandable.

To help us make the survey better, I am going to ask you to work on these questions in a way that may be different from what you are used to. Instead of going through the questions quietly, I want you to tell me what you are thinking as you are trying to figure out the answer to the questions. We call this "Thinking-aloud" because we would like you to say everything that you are thinking out loud as you answer the questions. Saying what you are thinking is extremely important to us because it will help us make sure that the questions we are asking are as clear and understandable as they can be. In a moment, I will give you an example of the think-aloud process. Then, I will give you a chance to practice it.

Before we begin, I want to reassure you that we will keep the information you give us confidential. The interview is for research purposes only, and none of the answers you provide will be shared with anyone other than our research team.

I will not be evaluating your answers, and no one will know that it was you who answered these questions. There is no right or wrong answer. The goal is to see whether the survey materials and questions are clear and understandable, and I need your help to do this.

If at any time you decide that you do not want to continue, that is your choice, and you may stop. This interview is being observed by my colleagues, who will be taking notes about your comments. Additionally, the interview will also be recorded, so that we can review the tapes later. No one else will hear your interview or review the tapes of your interview, except the researchers on this project.

We will work together for about 90 minutes.

Do you have any questions?

Okay, let's begin.

Think-Aloud Demonstration and Practice:

I'm now going to show you how to think out loud. When I am finished, you will get a chance to practice answering a question thinking aloud. Since we can't tell what is going on in your brain, and what you're thinking as we read these questions to you, we need you to "think aloud."

Let me give you an example (*Demonstrate think-aloud with example 1*).

The point of the think-aloud is not to describe what you are doing, or to tell me what you plan to do. Just say aloud whatever words and thoughts come into your head.

If I don't hear you speaking, I'll ask you to keep talking. I'm telling you this now, so you won't think I am criticizing the way you are working. I need to hear when you are confused, and determine what confuses you, and when you understand what you are reading or are being asked to do.

Now I want you to practice thinking aloud. I'm going to give you a simple survey item. First, I will read it out loud, and then I will listen for your response. Please try to think aloud as you figure out your answer. Remember to say out loud **whatever** you are thinking.

Example 1:

When you are hungry in the afternoon, which of the following choices would you consider buying from a vending machine? (Please check all that apply)

☐ Chocolate Bar

☐ Potato Chips

☐ Granola Bar

☐ Animal Crackers

☐ Pretzels

☐ Soda

Other _____ (Specify)

Example 2:

How many windows are in your home? _____

Next, I would like to show you some communication materials we will be using during the study. As part of the survey process, we will be sending out a letter to notify residents of the study. I have a draft of the letter right here.

[Place prenotification letter (ITEM A) in front of respondent]

<i>Could you please take a moment and read this letter?</i> <i>Although this is not a survey question, we'd still like to hear your thoughts.</i> <i>Remember to think aloud as you read this letter. Let me know when you are finished.</i>	In your own words, can you tell me what you think this letter is saying? Was there anything about this letter that you found difficult to understand or was not clear? Were there any words you didn't understand? Record problematic words: Based on what you read, what do you think will happen during this study? What options are available to express your interest in participating in this study? IF NEEDED, FOLLOW UP: What is this for <i>[point to unique ID]</i>?
---	---

ITEM A



<DATE>

<NAME>

<ADDRESS 1>

<ADDRESS 2>

<City>, <State>, <Zip>

Dear <insert name>,

The U. S. Consumer Product Safety Commission (CPSC) has asked EurekaFacts, a survey research company, to conduct a nationwide survey about household fire and carbon monoxide (CO) safety. The survey is very important and will help the CPSC improve home safety and save lives.

We would like to ask you to support this initiative by completing the survey. In the coming weeks, you may receive a phone call from EurekaFacts, from the number <NUMBER>, asking you to take part in a brief in-home interview. Please take a few minutes to respond and find out more about this study. Your experiences and thoughts on the topic are extremely valuable for this effort.

You've been specifically chosen as someone from whom we'd like to hear. Your household was selected at random from a list of households across the country that represent different regions and types of homes. Participation in this survey is voluntary and your responses will be maintained confidential and anonymous. If your home is selected for a visit you will be eligible to receive a \$50 gift card (from a major credit card company).

If you are interested in participating in this study, please go to the website <INTAKE WEB ADDRESS>

and enter your unique ID: [abc123]

Or you can call EurekaFacts at the toll-free-number <NUMBER>. To learn more about this study, please visit <WEBSITE>.

Thank you for your willingness to participate in this important survey.

Sincerely,

EurekaFacts, LLC on behalf of the
U.S. Consumer Product Safety Commission

I have another item I would like to share with you. Before scheduling the interview, members from our call center will telephone potential participants. During the call, call center representatives will read from a script explaining the study. We'd like your assistance in making sure this script is clear and understandable. I am going to read the script to you now, and when I am finished, I will follow up with some questions regarding the script. Are you ready?

[Read script (ITEM B) to respondent]

<i>Directions</i> 1. <i>[Read Introduction from Item B. Once finished, stop and read #2.]</i> <i>Before we continue, I do want to ask:</i> <i>[Read from Introduction section of probes]</i> 2. <i>Now we will ask some questions to determine whether you are eligible.</i> <i>[Read If Eligible from Item B. Once finished, read If Eligible section of probes.]</i> 3. <i>[Read overall probes]</i>	Introduction Can you tell me what you think this part is telling you? Was there anything about this script that you found difficult to understand or unclear? Were there any words you didn't understand? Record problematic words: If Eligible Can you tell me what you think this part is telling you? Was there anything about this script that you found difficult to understand or unclear? Were there any words you didn't understand? Record problematic words: Overall Overall, can you tell me what you think this script is telling you? IF NEEDED, FOLLOW UP: Could you please share with me what you think will happen during the interview?
---	--

	IF NEEDED, FOLLOW UP: What do you think will happen to the smoke and carbon monoxide alarms in the home? IF NEEDED, FOLLOW UP: How long will the interview last? Are there any incentives provided for participation? If yes, what is it?
--	---

ITEM B

INTRODUCTION

Hello, my name is [NAME] from EurekaFacts, a survey research company in Rockville, MD. EurekaFacts, on behalf of the U.S. Consumer Product Safety Commission (CPSC), is conducting an important nationwide survey on household fire and carbon monoxide safety. The survey will help CPSC improve home safety and save lives. Your experiences and thoughts on the topic are extremely valuable to this effort.

May I speak with _____?

The purpose of this survey is to gather information about the functionality of smoke and carbon monoxide (CO) alarms in homes in the United States. If your home does not have any smoke or CO alarms, we are still interested in conducting the survey. Findings from this research will help CPSC improve home safety. The interview will last no more than [**Survey Length**], and if you qualify and complete the in-home interview, you will receive a \$50 gift card from a major credit card company in appreciation for your participation.

Would you like to hear more about this study?

IF ELIGIBLE

Thank you for answering these questions. You are eligible to help with this important research effort.

The purpose of this survey is to gather information about the functionality of smoke and carbon monoxide (CO) alarms in homes in the United States. Findings from this research will help CPSC improve home safety.

This study will require a two-member survey team to visit your home to ask you a series of questions about household fire and carbon monoxide safety and then test your smoke and carbon monoxide alarms to see if they are working properly. The interview will last no more than [**Survey Length**]. In appreciation for your participation, we will provide you with a \$50 gift card from a major credit card company. If any of your alarms don't work, we will offer to replace them free of charge.

The interview is for research purposes only, and none of the answers you provide will be shared with or used by anyone else.

[Read script (ITEM C) to respondent]

Thank you, those are all of the communication items we have for you. Now we will go on to some of the survey questions.

ITEM C

“We are asking people in your community a few questions about their smoke and carbon monoxide alarms, and doing some simple tests to make sure the alarms work properly. If the batteries in your alarm need to be replaced, we have new batteries to give you, free of charge. Additionally, if any of your alarms do not work, we have new ones to replace them, again, free of charge. As you probably know, properly operating smoke alarms can help protect you and your family if there’s a fire. Additionally, properly operating carbon monoxide alarms can help protect you from carbon monoxide poisoning. We would like to collect any alarms that don’t work and send them to the U.S. Consumer Product Safety Commission’s lab to find out why they don’t work. This interview will take up to 60 minutes, and at the end of the interview, we will provide you with a \$50 gift card in appreciation for your participation.”

[Question 4a - Version 1]

4a. Do you have any smoke alarms in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
☐ No
☐ Don't know

<i>Q4: As we work together, I will be reading each question aloud, and recording your responses along with any think-aloud comments.</i> <i>Once you are finished answering the question, I'll follow up with some questions that will help us know whether the questions are clear and understandable.</i> <i>OK, please listen as I read this question, and then tell me your response.</i> <i>Remember to think-aloud when providing your response.</i>	In your own words, can you tell me what you think this question was asking? Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? IF R SELECTS "DON'T KNOW" I noticed you selected Don't Know, in response to this question. How do you think we could word the question or describe the alarm in a way that would assist people with identifying whether there is an alarm in the home? <i>[Show question to respondent]</i> In this question, what does the term "smoke alarm" <i>[point to term]</i> mean to you? IF NEEDED, FOLLOW UP: Is there another term you would use for "smoke alarm," in this context? Tell me what you were thinking when I asked about "uninhabited outbuildings or apartment hallways." <i>[point to item]</i> IF NEEDED, FOLLOW UP: Could you provide an example?
--	--

[Read the alternative version of the item to the participant, and ask them the following]:

After hearing both versions: Do you find one of these two questions easier to answer? If so, which one and why?

☐ Version 1

☐ Version 2

☐ Same

Which term is more familiar to you “smoke *alarm*” or “smoke *detector*”?

☐ Alarm

☐ Detector

☐ Neither

Do you think there is a difference between an “alarm” and a “detector”?
FOLLOW UP: How do you think they are (the same or different)?

[Question 4a - Version 1]

4a. Do you have any smoke alarms in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
- ☐ No
- ☐ Don't know

[Question 4a - Version 2]

4a. Do you have any smoke detectors in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
- ☐ No
- ☐ Don't know

[Question 4b – Version 1]

4b. Are any of your smoke alarms connected to a central alarm or security system that notifies the police or fire department?

- ☐ Yes
☐ No
☐ Don't Know

Q 4b: Please listen as I read the question, and then tell me your response.

Remember to think aloud when providing your response.

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Could you please tell me what you were thinking when I asked about a smoke alarm that is "connected to a central alarm or security system?" *[point to term]*

IF NECESSARY: Could you provide an example?

IF R SELECTS "YES" in Q4b

You said "Yes" in Q4b. How do you know that the smoke alarm is connected to a central alarm or security system?

IF R SELECTS "DON'T KNOW" in Q4b

You said "Don't know." For what reasons did you provide this response?

IF NECESSARY: Do you not know whether your alarm is attached to a central alarm or security system, or are you unfamiliar with what a central

	alarm or security system is? _____ _____ _____ How would you know if your smoke alarm is connected to a central alarm or security system? _____ _____ <i>[Read the alternative version of the item to the participant, and ask them the following]:</i> Looking at both versions, do you find one of these two questions easier to answer? If so, which one, and why? ☐ Version 1 ☐ Version 2 ☐ Same _____ _____ Does the explanation in this version <i>[point to version 2]</i> help you with understanding the question? Would you have answered the question differently if the question was included initially? _____ _____
--	--

[Question 4b – Version 1]

4b. Are any of your smoke alarms connected to a central alarm or security system that notifies the police or fire department?

- ☐ Yes
- ☐ No
- ☐ Don't Know

[Question 4b – Version 2]

4b. Are any of your smoke alarms connected to a central alarm or security system that notifies the police or fire department? What we mean by this is, if the smoke alarm detected smoke, would it automatically notify the police or fire department?

- ☐ Yes
- ☐ No
- ☐ Don't Know

4c. Has the police or fire department ever arrived at your residence for a fire- or smoke-related incident and informed you that they are responding to a notification they received from a central alarm or security system?

- ☐ Yes
☐ No
☐ Never had a fire or smoke-related incident

4d. On a scale of 1 to 5, where 1 is “Not at All Safe,” and 5 is “Extremely Safe,” to what extent do you believe your home is safe with your current smoke alarms?

1 2 3 4 5 DK RF

<i>Q4c - 4d: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your responses.</i> <i>[After Q 4c, read Q 4c probes]</i> <i>[After Q 4d, read Q 4d probes]</i>	Question 4c In your own words, can you tell me what you think this question was asking? Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? Record problematic words: Question 4d What does the word “safe” mean to you as it is used in this question? How easy or difficult was it to provide an answer? [If difficult] Could the question be worded differently to make it easier to answer? If so, how?
---	--

[Question 5a - Version 1]

5a. Do you have any carbon monoxide alarms in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
☐ No
☐ Don't know

Q5a: Please listen as I read the question, and then tell me your response.

Remember to think aloud when providing your response.

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

What does the word "carbon monoxide alarm" mean to you as it's used in this question?

[Read the alternative version of the item to the participant, and ask them the following]:

After hearing both versions, do you find one of these two questions easier to answer? If so, which one, and why?

☐ Version 1 ☐ Version 2 ☐ Same

Which term is more familiar to you, "carbon monoxide *alarm*" or "carbon monoxide *detector*"?

☐ Alarm ☐ Detector ☐ Neither

[Question 5a - Version 2]

5a. Do you have any carbon monoxide detectors in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
- ☐ No
- ☐ Don't know

6. **Do you or another member of your household, own or rent your home?**
- ☐ Own
- ☐ Rent
- ☐ Don't know
- ☐ Refused
7. **How long have you lived in this (apartment/house)? Would that be . . . (READ LIST)**
- ☐ Less than 6 months
- ☐ 6 to 11 months
- ☐ 1 to 5 years
- ☐ 6 to 10 years
- ☐ 11 years or more
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)
8. **Please tell me to the best of your knowledge, in what year was this (apartment/house) built? Was it . . . (READ LIST)**
- ☐ 2010 or later
- ☐ Between 2000 and 2009
- ☐ Between 1990 and 1999
- ☐ Between 1980 and 1989
- ☐ Before 1980
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

<i>Q 6 - 8: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your responses.</i>	Were any of the questions difficult to answer?
	Were there any words that you did not understand?
	Record problematic words:
	For question 7, how easy or difficult was it to remember how long you have lived in your residence?
	For question 8, how easy or difficult was it to remember what year your residence was built?

--	--

9a. Does this residence have an attached garage?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

9b. For what purposes is the attached garage used? Would you say . . (READ LIST, SELECT ALL THAT APPLY)

- ☐ Workshop/workspace
- ☐ Store tools or lawn/sports equipment
- ☐ Store vehicle(s) (e.g., motorcycle, car, SUV, van)
- ☐ Fuel-burning appliances (e.g., furnace, water heater, grill)
- ☐ Other (Specify)_____
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

9c. What type of fuel-burning appliances, if any, do you use in your home? (READ LIST, SELECT ALL THAT APPLY)

- | | |
|--|---|
| ☐ Gas-powered generator | ☐ Wood- or pellet-burning fireplace |
| ☐ Furnace or boiler | ☐ Other (Specify)_____ |
| ☐ Water heater | ☐ Do not own any fuel-burning appliances |
| ☐ Charcoal grill | ☐ Don't know (DON'T READ) |
| ☐ Wood- or pellet-burning stove | ☐ Refused (DON'T READ) |

INTERVIEWERS, PLEASE NOTE:

Ask respondent to answer the questions that may not apply. Some questions may not apply. Although the item may not apply, we are still interested in understanding whether the question and its response options are clear and understandable. Additionally, we would like to see if the response options are inclusive, and mutually exclusive.

Q 9a – 9c: Please listen as I read these questions, and then tell me your response after each question.

Remember to think aloud when providing your response.

[After Q 9a, read Q 9a probes]

[After Q 9b, read Q 9b probes]

[After Q 9c, read Q 9c probes]

Question 9a

In your own words, can you tell me what you think this question was asking?

IF NEEDED: Could you please tell me what you were thinking when I asked about “attached garage.”

Question 9b

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn’t understand?

Record problematic words:

[Show question to respondent]

Did all of the options in this question make sense to you?

For this question, can you think of any other purposes that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

Question 9c

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Did all of the options in this question make sense to you?

For this question, do you think there are other types of fuel-burning appliances that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

9b. For what purposes is the attached garage used? Would you say . . . (READ LIST, SELECT ALL THAT APPLY)

- ☐ Workshop/workspace
- ☐ Store tools or lawn/sports equipment
- ☐ Store vehicle(s) (*e.g.*, motorcycle, car, SUV, van)
- ☐ Fuel burning appliances (*e.g.*, furnace, water heater, grill)
- ☐ Other (Specify)_____
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

9c. What type of fuel-burning appliances, if any, do you use in your home? (READ LIST, SELECT ALL THAT APPLY)

- | | | | |
|--------------------------|------------------------------|--------------------------|--|
| ☐ | Gas powered generator | ☐ | Wood or pellet burning fireplace |
| ☐ | Furnace or boiler | ☐ | Other (Specify)_____ |
| ☐ | Water heater | ☐ | Do not own any fuel-burning appliances |
| ☐ | Charcoal grill | ☐ | Don't know (DON'T READ) |
| ☐ | Wood or pellet burning stove | ☐ | Refused (DON'T READ) |

10a. About how often is the smoke alarm or alarms tested in your home? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Once every few years
- ☐ Every year
- ☐ Every 7–11 months
- ☐ Every 2–6 months
- ☐ Every month
- ☐ Every week
- ☐ Other (Specify) _____
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

10b. Please tell me some of the reasons why you have not tested your smoke alarm or alarms? (DO NOT READ LIST, SELECT ALL THAT APPLY):

- ☐ Did not know you should test
- ☐ Did not think it was important enough
- ☐ Did not know how to test
- ☐ Don't need to test because they go off occasionally
- ☐ Physically unable to reach
- ☐ Other (Specify) _____
- ☐ Don't know
- ☐ Refused

10c. Do you know how to test your smoke alarm or alarms?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

INTERVIEWERS, PLEASE NOTE:

Ask respondent to answer the questions that may not apply. Some questions may not apply. Although the item may not apply, we are still interested in understanding whether the question and its response options are clear and understandable. Additionally, we would like to see whether the response options are inclusive, and mutually exclusive.

*Q 10a – 10c:
Please listen as I
read these
questions, and
then tell me your
response after
each question.*

*Remember to
think aloud when
providing your
responses.*

*[After Q 10a,
read Q 10a
probes]*

*[After Q 10b,
read Q 10b
probes]*

Question 10a

Did all of the options in this question make sense to you?

How easy or difficult was it to remember how often you test your smoke alarm?

[Show question to respondent]

Are there any other ways you would think about the blocks of time?

Question 10b

[Show question to respondent]

Did all of the options in this question make sense to you?

For this question, were there any other reasons someone may not test their smoke alarm that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

Were any of the questions difficult to answer?

Were there any words that you did not understand?

Record problematic words:

10a. About how often is the smoke alarm or alarms tested in your home? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Once every few years
- ☐ Every year
- ☐ Every 7–11 months
- ☐ Every 2–6 months
- ☐ Every month
- ☐ Every week
- ☐ Other (Specify)_____
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

**10b. Please tell me the reasons why you have not tested your smoke alarm or alarms?
(DO NOT READ LIST, SELECT ALL THAT APPLY):**

- ☐ Did not know you should test
- ☐ Did not think it was important enough
- ☐ Did not know how to test
- ☐ Don't need to test because they go off occasionally
- ☐ Physically unable to reach
- ☐ Other (Specify) _____
- ☐ Don't know
- ☐ Refused

11a. Do you think most or all of your smoke alarms are working? By working, I mean they would make a sound if they detected smoke right now.

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

11b. What are some of the reasons your smoke alarms may not be working? Again, by working, I mean the smoke alarm would make a sound if it detected smoke right now. (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Did not get around to fixing it
- ☐ Do not know how to fix or replace it
- ☐ Unable to install or fix it
- ☐ Unable to afford new ones
- ☐ Disconnected it
- ☐ It is the landlord's responsibility
- ☐ Removed battery
- ☐ Batteries never installed
- ☐ Batteries not working and not yet replaced
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

11c. You mentioned that one or more of your smoke alarms was disconnected. For what reason(s) were the smoke alarms disconnected? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Nuisance when they go off
- ☐ Alarm frequently went off
- ☐ Would not stop beeping/chirping
- ☐ No longer worked
- ☐ No reason in particular
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

11d. You mentioned that the batteries were removed from one or more of your smoke alarms. For what reason(s) were the batteries removed from your smoke alarm or alarms? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Batteries no longer worked
- ☐ Batteries were leaking/discharge
- ☐ Batteries expired
- ☐ Alarm would not stop beeping/chirping
- ☐ Intended to replace batteries, but forgot to install new ones
- ☐ Installed wrong type of batteries
- ☐ Needed batteries for another device

- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

INTERVIEWERS, PLEASE NOTE:

Ask respondent to answer the questions that may not apply. Some questions may not apply. Although the item may not apply, we are still interested in understanding whether the question and its response options are clear and understandable. Additionally, we would like to see whether the response options are inclusive, and mutually exclusive.

<i>Q 11a- 11d: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your response.</i> <i>[After Q 11a, read Q 11a probes]</i> <i>[After Q 11b, read Q 11b probes]</i> <i>[After Q 11c, read Q 11c probes]</i> <i>[After Q 11d, read Q 11d probes]</i>	Question 11a In your own words, can you tell me what you think this question was asking? _____ _____ Was there anything about this question that you found difficult to understand or was not clear? Were there any words you didn't understand? _____ _____ Record problematic words: _____ _____ What does the word "working" mean to you as it's used in this question? Is there another way you would describe it? _____ _____ Question 11b In your own words, can you tell me what you think this question was asking? _____ _____ Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? _____ _____ Record problematic words: _____ _____ <i>[Show question to respondent]</i>
--	--

Did all of the options in this question make sense to you?

How easy or hard was it to choose an answer?

Tell me why you chose [answer] instead of some other answer on this list?

Is there a difference between “Do not know how to fix and replace it” and “Unable to install or fix it”? FOLLOW UP: How do you think they are (the same or different)?

Were there any other reasons that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

Question 11c

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Did all of the options in this question make sense to you?

How easy or hard was it to choose an answer?

What does the word “nuisance” mean to you?

IF NECESSARY: Could you provide an instance where an alarm would be a nuisance when they go off?

Were there any other reasons that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

Question 11d

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn’t understand?

Record problematic words:

[Show question to respondent]

Did all of the options in this question make sense to you?

How easy or hard was it to choose an answer?

	Were there any other reasons that should be provided in this list?
	IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?
	PROBE: For what reasons did you select only one response?
	Were any of the questions difficult to answer?
	Were there any words that you did not understand?
	Record problematic words:

11b. What are some of the reasons why your smoke alarms may not be working? Again, by working, I mean the smoke alarm would make a sound if it detected smoke right now. (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Did not get around to fixing it
- ☐ Do not know how to fix or replace it
- ☐ Unable to install or fix it
- ☐ Unable to afford new ones
- ☐ Disconnected it
- ☐ It is the landlord's responsibility
- ☐ Removed battery
- ☐ Batteries never installed
- ☐ Batteries not working and not yet replaced
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

11c. You mentioned that one or more of your smoke alarms was disconnected. For what reason(s) were your smoke alarms disconnected? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Nuisance when they go off
- ☐ Alarm frequently went off
- ☐ Would not stop beeping/ chirping
- ☐ No longer worked
- ☐ No reason in particular
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

11d. You mentioned that the batteries were removed from one or more of your smoke alarms. For what reason(s) were the batteries removed from your smoke alarm or alarms? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Batteries no longer worked
- ☐ Batteries were leaking/discharge
- ☐ Batteries expired
- ☐ Alarm would not stop beeping/chirping
- ☐ Intended to replace batteries, but forgot to install new ones
- ☐ Installed wrong type of batteries
- ☐ Needed batteries for another device
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

12. Do you know how to . . .

	Yes	No	Don't know	Refused
a. Install a smoke alarm?	☐	☐	☐	☐
b. Maintain a smoke alarm in good working order?	☐	☐	☐	☐

Q 12a- 12b: Please listen as I read these questions, and then tell me your response after each question.

Remember to think aloud when providing your response.

Question 12b

In your own words, can you tell me what you think this question was asking?

How would someone “maintain” a smoke alarm? Could you provide some examples?

What does the phrase “good working order” mean to you as it’s used in this question?

Were any of the questions difficult to answer?

Were there any words that you did not understand?

Record problematic words:

13. To the best of your knowledge, how often should you replace the smoke alarms in your home? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Less than 1 year
- ☐ 1–3 years
- ☐ 4–6 years
- ☐ 7–9 years
- ☐ 10 years
- ☐ More than 10 years
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

Q13: Please listen as I read the question, and then tell me your response.

Remember to think aloud when providing your response.

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

How did you come up with that answer?

How easy or hard was it to choose an answer?

[Show question to respondent]

Are there other ways you would think about the blocks of time?

13. To the best of your knowledge, how often should you replace the smoke alarms in your home? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Less than 1 year
- ☐ 1 – 3 years
- ☐ 4 – 6 years
- ☐ 7 – 9 years
- ☐ 10 years
- ☐ More than 10 years
- ☐ Don't know
- ☐ Refused

14a. In the past 12 months, have you had any accidental fires—that is, unintended or unwanted smoke or flames—in your home or on your property? Please include fires that were too small to call the fire department.

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

14b. Thinking of your most recent accidental fire(s), how did you become alerted to the incident? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Saw the fire
- ☐ Smelled the fire
- ☐ Heard the fire
- ☐ Felt the heat of the fire
- ☐ Smoke alarm
- ☐ Someone notified me
- ☐ Other (Specify) _____
- ☐ Don't remember
- ☐ Don't know
- ☐ Refused

14c. Thinking of your most recent accidental fire(s), did any of the smoke alarms go off during the fire(s)?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

14d. Thinking of your most recent accidental fire(s), do you think that enough smoke reached the smoke alarm that it should have sounded?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

INTERVIEWERS, PLEASE NOTE:

Ask respondent to answer the questions that may not apply. Some questions may not apply. Although the item may not apply, we are still interested in understanding whether the question and its response options are clear and understandable. Additionally, we would like to see whether the response options are inclusive, and mutually exclusive.

Q 14a- 14c: Please listen as I read these questions, and then tell me your response after each question.

Remember to think aloud when providing your response.

[After Q 14a, read Q 14a probes]

[After Q 14b, read Q 14b probes]

Question 14a

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or was not clear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

What does the term "accidental fire" mean to you as it is used in this question? *[point to term]*

Tell me what you were thinking about when I asked about "accidental fire."

PROBE, IF NECESSARY: Could you provide some examples?

Question 14b

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Did all the options make sense to you?

Were there any other ways of being notified of a fire that should be provided on this list?

Do you think there is a difference between the response options “Don’t remember” and “Don’t know”? *[point to terms]* FOLLOW UP: How do you think they are (the same or different)?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

Question 14d

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn’t understand?

Record Problematic words:

14a. In the past 12 months, have you had any accidental fires—that is unintended or unwanted smoke or flames—in your home or on your property? Please include fires that were too small to call the fire department.

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

14b. Thinking of the most recent accidental fire(s), how did you become alerted to the incident? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Saw the fire
- ☐ Smelled the fire
- ☐ Heard the fire
- ☐ Felt the heat of the fire
- ☐ Smoke alarm
- ☐ Someone notified me
- ☐ Other (Specify) _____
- ☐ Don't remember
- ☐ Don't know
- ☐ Refused

15a. In the past 12 months, have any of your smoke alarms gone off when there was no fire, other than when the smoke alarm was being tested?

- ☐ Yes
☐ No
☐ Don't know
☐ Refused

15b. Why do you think the smoke alarm went off when there was no fire? (DO NOT READ LIST, SELECT ALL THAT APPLY).

- ☐ Cooking
☐ Fireplace
☐ Tobacco
☐ Steam from bathroom
☐ Low battery
☐ Other (Specify) _____
☐ No apparent reason
☐ Don't know
☐ Refused

Q 15a- 15b: Please listen as I read these questions, and then tell me your response after each question.

Remember to think aloud when providing your response.

[After Q 15a, read Q 15a probes]

[After Q 15b, read Q 15b probes]

Question 15a

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

Question 15b

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

[Show question to respondent]

For this question, were there any other reasons that should be provided in

	the list? PROBE, IF NECESSARY: Could you provide me with some examples? IF R SELECTS ONLY ONE RESPONSE ASK: Is that all? PROBE: For what reasons did you select only one response? Were any of the questions difficult to answer? Were there any words that you did not understand?
--	---

15b. Why do you think the smoke alarm went off when there was no fire? (DO NOT READ LIST, SELECT ALL THAT APPLY).

- ☐ Cooking
- ☐ Fireplace
- ☐ Tobacco
- ☐ Steam from bathroom
- ☐ Low battery
- ☐ Other (Specify) _____
- ☐ No apparent reason
- ☐ Don't know
- ☐ Refused

16. How would you know if elevated levels of carbon monoxide (CO) were present in your home? (DO NOT READ LIST, SELECT ALL THAT APPLY).

- ☐ You can smell it
- ☐ You can taste it
- ☐ You can see it
- ☐ You can feel it
- ☐ Carbon monoxide alarm
- ☐ Other (Specify)_____
- ☐ Respondent does not believe there is a way to know if CO is present
- ☐ Don't know
- ☐ Refused

17. How familiar are you with carbon monoxide alarms? (READ LIST)

- ☐ Not at all familiar
- ☐ Not very familiar
- ☐ Somewhat familiar
- ☐ Very familiar
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

<i>Q 16 - 17: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your response.</i>	Question 16 In your own words, can you tell me what you think this question was asking? _____ _____ _____ Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? _____ _____ Record problematic words: _____ _____ <i>[Show question to respondent]</i> What does the term "carbon monoxide" <i>[point to term]</i> mean to you as it's used in this question? _____ _____ What does the phrase "elevated levels of carbon monoxide" <i>[point to phrase]</i>
---	---

mean to you, as it's used in this question?

Is there a different way you would say that?

Were there any other reasons that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE, ASK: Is that all?

PROBE: For what reasons did you select only one response?

Question 17

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

16. How would you know if elevated levels of carbon monoxide (CO) were present in your home? (DO NOT READ LIST, SELECT ALL THAT APPLY).

- ☐ You can smell it
- ☐ You can taste it
- ☐ You can see it
- ☐ You can feel it
- ☐ Carbon monoxide alarm
- ☐ Other (Specify)_____
- ☐ Respondent does not believe there is a way to know if CO is present
- ☐ Don't know
- ☐ Refused

18a. About how often do you test your carbon monoxide alarm or alarms? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Once every few years
- ☐ Every year
- ☐ Every 7–11 months
- ☐ Every 2–6 months
- ☐ Every month
- ☐ Every week
- ☐ Other (Specify) _____
- ☐ Don't know
- ☐ Refused

18b. What are the reasons why you have not tested your carbon monoxide alarm or alarms? (Open ended, capture their response)

<i>Q 18a- 18b: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your response.</i> <i>[Ask respondent to answer the next question, regardless of status of CO alarm]</i>	Were any of the questions difficult to answer? _____ _____
	Were there any words that you did not understand? _____ _____
	Record problematic words: _____ _____
	Question 18a <i>[Show question to respondent]</i> Are there any other ways you would think about the blocks of time? _____ _____
	For question 18b, was it easy or difficult to decide what answer to give? _____ _____

--	--

18a. About how often do you test your carbon monoxide alarm or alarms? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Once every few years
- ☐ Every year
- ☐ Every 7–11 months
- ☐ Every 2–6 months
- ☐ Every month
- ☐ Every week
- ☐ Other (Specify) _____
- ☐ Don't know
- ☐ Refused

20. For what reasons do you have a carbon monoxide alarm? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ It is required by law
- ☐ It makes me feel safe
- ☐ It is helpful in detecting carbon monoxide
- ☐ It came with the residence
- ☐ I own generators/ fuel-burning appliances
- ☐ Other (Specify)_____
- ☐ Don't know
- ☐ Refused

Q20: Please listen as I read the question, and then tell me your response.

Remember to think aloud when providing your response.

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

In this list, what does the term "detecting" *[point to term]* mean to you?

Were there any other reasons that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

20. For what reasons do you have a carbon monoxide alarm? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ It is required by law
- ☐ It makes me feel safe
- ☐ It is helpful in detecting carbon monoxide
- ☐ It came with the residence
- ☐ I own generators/ fuel-burning appliances
- ☐ Other (Specify)_____
- ☐ Don't know
- ☐ Refused

22a. In the past 12 months, has your carbon monoxide alarm or alarms ever gone off, other than when the carbon monoxide alarm was being tested?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

22b. Thinking of the last time your carbon monoxide alarm went off, how did you react when you heard the alarm? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Left the house
- ☐ Called the fire department
- ☐ Ventilated home (opened windows, door, used fan, etc.)
- ☐ Unplugged or disconnected it
- ☐ Reset it
- ☐ Removed battery
- ☐ Other action (Specify)_____
- ☐ Don't remember
- ☐ Don't know
- ☐ Refused

Q 22a- 22b: Please listen as I read these questions, and then tell me your response after each question.

Remember to think aloud when providing your response.

Were any of the questions difficult to answer?

Were there any words that you did not understand?

Record problematic words:

Question 22b

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

	Record problematic words: _____ _____ <i>[Show question to respondent]</i> What does the term “react” [<i>point to term</i>] mean to you, as it is used in this question? _____ _____ IF NEEDED, FOLLOW UP: Could you provide an example? _____ _____ IF NEEDED, FOLLOW UP: Is there another term you would use instead of “react” in this context? _____ _____ For this question, were there any other types of reactions that should be provided in this list? _____ _____ IF R SELECTS ONLY ONE RESPONSE ASK: Is that all? _____ _____ PROBE: For what reasons did you select only one response? _____ _____
--	---

22b. Thinking of the last time your carbon monoxide alarm went off, how did you react when you heard the alarm? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Left the house
- ☐ Called the fire department
- ☐ Ventilated home (opened windows, door, used fan, etc.)
- ☐ Unplugged or disconnected it
- ☐ Reset it
- ☐ Removed battery
- ☐ Other action (Specify) _____
- ☐ Don't remember
- ☐ Don't know
- ☐ Refused

24. In the past 12 months, have any of your friends, relatives, neighbors, or coworkers experienced . . .

	Yes	No	Don't know	Refused
a. An accidental fire?	☐	☐	☐	☐
b. A carbon monoxide incident? (e.g., effects of carbon monoxide poisoning)	☐	☐	☐	☐

Q 24a- 24b: Please listen as I read these questions, and then tell me your response after each question.

Remember to think aloud when providing your response.

.

Were any of the questions difficult to answer?

Were there any words that you did not understand?

Record problematic words:

Question 24b

[Show question to respondent]

Please tell me what you were thinking when I asked about “carbon monoxide incident.”

Please tell me what you were thinking when I asked about “effects of carbon monoxide poisoning.”

If appropriate, probe:

Could you provide some symptoms of the effects of carbon monoxide poisoning?

Does the example in 24b help you with understanding the question? Would you answer it differently if it were removed? *[point to explanation]*

24. In the past 12 months, have any of your friends, relatives, neighbors, or coworkers experienced . . .

	Yes	No	Don't know	Refused
a. An accidental fire?	☐	☐	☐	☐
b. A carbon monoxide incident? (e.g., effects of carbon monoxide poisoning)	☐	☐	☐	☐

25. How many floors (levels) are there in your home? Please include the basement and attic, if you have one. _____

Q25: Please listen as I read the question, and then tell me your response.

*Remember to think aloud
when providing your
response.*

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Does the word “levels” in parenthesis [point to word] help you understand the question? Would you answer it differently if it were removed?

How did you come up with that answer?

How easy or difficult is it to remember how many floors are in your home?

25. How many floors (levels) are there in your home? Please include the basement and attic, if you have either or both. _____

[Place smoke alarm in front of respondent]

26-1w. (READ): How old do you think this alarm is? Would you say . . .

- ☐ Less than 1 year old
- ☐ 1–5 years old
- ☐ 6–10 years old
- ☐ More than 10 years old
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

<i>Q26-1w: For this question, I want you to imagine we are asking about this alarm.</i> <i>[Place alarm in front of respondent]</i> <i>Please listen as I read the question, and then tell me your response.</i> <i>Remember to think aloud when providing your response.</i>	In your own words, can you tell me what you think this question was asking? _____ _____ _____ Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? _____ _____ _____ Record problematic words: _____ _____ Tell me what you were thinking when I asked about how "old" the alarm is. _____ _____ <i>If necessary, probe:</i> What were you thinking about when I asked when was the alarm manufactured or installed? ☐ <i>Manufactured</i> ☐ <i>Installed</i>
---	---

29. On a scale of 1 to 5, where 1 is “Not at All Necessary,” and 5 is “Extremely Necessary,” how necessary do you believe it is to have a smoke alarm installed in your home?

1 2 3 4 5 DK RF

<i>Q29: Please listen as I read the question, and then tell me your response.</i> <i>Remember to think aloud when providing your response.</i>	In your own words, can you tell me what you think this question was asking? Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? How easy or hard was it to select an answer? Record Problematic words:
--	--

30. Can you tell me some of the reasons why you don't have smoke alarms installed in your home? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Don't think I need any
- ☐ Did not come with residence
- ☐ They are a nuisance
- ☐ They did not or don't work
- ☐ Never got around to replacing previous alarms
- ☐ It is the landlord's responsibility
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

Q30: Please listen as I read the question, and then tell me your response.

Remember to think aloud when providing your response.

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Were there any other reasons someone may not have a smoke alarm installed in their home that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

34a. In the past 12 months, have you sought out any information about fire and carbon monoxide safety?

- ☐ Yes
☐ No
☐ Don't know
☐ Refused

34b. Where do you obtain information about fire and carbon monoxide safety? (READ LIST, SELECT ALL THAT APPLY)

Interviewer: First collect information related to fire safety, then carbon monoxide safety.

Sources of information	Fire safety	Carbon monoxide safety
News and media like TV news, newspaper, or radio	☐	☐
Online websites	☐	☐
Family or close friends	☐	☐
Community or religious organizations	☐	☐
Social media like Facebook, Twitter, or Blogs	☐	☐
Local fire department	☐	☐
None of these (DON'T READ)	☐	☐
Don't know (DON'T READ)	☐	☐
Refused (DON'T READ)	☐	☐

INTERVIEWERS, PLEASE NOTE:

Ask respondent to answer the questions that may not apply. Some questions may not apply. Although the item may not apply, we are still interested in understanding whether the question and its response options are clear and understandable. Additionally, we would like to see whether the response options are inclusive, and mutually exclusive.

<i>Q34a – 34b: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your responses.</i>	Question 34a In your own words, can you tell me what you think this question was asking? Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?
---	--

[After Q 34a, ask Q 34a probes]

[After Q 34b, ask Q 34b probes]

Record problematic words:

Question 34b

In your own words, can you tell me what you think this question was asking?

a) Where do you obtain information about fire safety?

b) Where do you obtain information about carbon monoxide safety?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Were there any other sources that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

34b. Where do you obtain information about fire and carbon monoxide safety? (READ LIST, SELECT ALL THAT APPLY)

Sources of information	Fire safety	Carbon monoxide safety
News and media like TV news, newspaper, or radio	☐	☐
Online websites	☐	☐
Family or close friends	☐	☐
Community or religious organizations	☐	☐
Social media like Facebook, Twitter, or Blogs	☐	☐
Local fire department	☐	☐
None of these (DON'T READ)	☐	☐
Don't know (DON'T READ)	☐	☐
Refused (DON'T READ)	☐	☐

35. How often do you or another member of the household cook at home? Does a member of this household cook . . . (READ LIST)

- ☐ Never
- ☐ Less than once a month
- ☐ A few times per month
- ☐ A few times per week
- ☐ Every day
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

<i>Q35: Please listen as I read the question, and then tell me your response.</i> <i>Remember to think aloud when providing your response.</i>	In your own words, can you tell me what you think this question was asking? _____ _____ _____
	Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? _____ _____ _____
	Record Problematic words: _____ _____
	What does the word "cook" mean to you as it is used in this question? _____ _____
	Tell me what you were thinking when I asked about cooking at home. _____ _____
	PROBE: Could you provide some examples of cooking? _____ _____

Great! To ensure that we interview a broad mix of residents, I have a few brief demographic questions to ask about you and others within this household. This should only take a few minutes of your time.

36. Including yourself, how many people live or stay in your household? This can include:

- Anyone who is living or staying there for more than 2 months
- Yourself, if you are living there for more than 2 months
- Anyone else staying there who does not have another place to stay, even if they are there for 2 months or less

Please do not include anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment.

Enter number **of people**

37. Thinking of the individual(s) who live here, is there anyone . . .

	Yes	No	Don't know	Refused	If yes, how many?
Under 5 years old?	☐	☐	☐	☐	
5-17 years old?	☐	☐	☐	☐	
18-64 years old?	☐	☐	☐	☐	
65 years old, or older?	☐	☐	☐	☐	

<i>Q 36 – 37: And finally, I have a couple more questions to ask you. But before I get to those questions, I want to read an introduction to those questions, and then hear your thoughts.</i> <i>[Once the respondent had provided his or her interpretation of the instructions, give the following</i>	Record issues with introduction:

	Question 36
	In your own words, can you tell me what you think this question was asking?

	Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

	Record problematic words:

	How did you come up with that answer?

<i>directions]</i> <i>Great. Now, please listen as I read the questions, and then tell me your response.</i> <i>Remember to think aloud when providing your response.</i> <i>[After Q 36, read Q 36 probes]</i> <i>[After Q 37, read Q 37 probes]</i>	How easy or difficult was it to provide an answer? [If difficult] Could the question be worded differently to make it easier to answer? If so, how? PROBE: Thinking of families you know who may • have a larger household, • or less stable living circumstances How easy or difficult do you think it may be for them to answer this question? Question 37 Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? Record Problematic words:
--	---

The U.S. Consumer Product Safety
Commission (CPSC) Survey on Usage
and Functionality of Smoke Alarms and
Carbon Monoxide Alarms in Households
Cognitive Interview Protocol
Group: *No Alarm*

Interviewer name: _____
Participant ID: _____
Date and Time: _____

The answers for the questions 1 through 9 must be filled before the interview.

Ref #	Question/Prompt	Response
	Preliminary Information	
1	Name of interviewer	
2	Date	
3	Participant ID	
4	Age	
5	Participant's Gender (note: Do not ask participant)	☐ Male ☐ Female
6	Type of residence	☐ Single-Family Detached Home ☐ Mobile/Other Manufactured Home ☐ Trailer/RV ☐ Apartment/Condominium ☐ Single-Family Attached Housing (Townhouse, row house) ☐ Other Specify _____
7	Type of alarm(s) (note: Select all that apply)	☐ Smoke alarm(s) ☐ CO alarm(s) ☐ Central alarm ☐ No smoke or CO alarm
8	Connected to central alarm or security system	☐ Yes ☐ No
9	Special circumstances that may have affected the interview (note: Do not ask participant)	

INTERVIEWERS INSTRUCTIONS: *The interviewer should not read the script word for word, but should be familiar enough with its contents to conduct the interview in a natural and conversational manner, paraphrasing or giving additional explanation, as appropriate. The protocol provides a list of suggested probes to ask and guidelines on which survey items need to be tested. However, the interview will require a flexible probing approach, with the selection of relevant probes or modifications to the listed probe formulations, depending on the participant's think-aloud responses and answers to the survey items.*

Introduction:

Hello, my name is _____, and I work for EurekaFacts. It's nice to meet you. Thank you very much for helping us out today.

Let me begin by explaining our goal and what you are going to be doing. We will soon be conducting a nationwide survey on household safety. The survey is very important and will help the U.S. Consumer Product Safety Commission (CPSC), improve the safety of U.S. homes.

Before we give out the survey, we would like feedback on the survey questions and accompanying communication materials from you. The purpose of today's interview is to help us make sure that the questions we will be asking other household residents and the accompanying communication materials, as part of a nationwide household safety survey, are clear and understandable.

To help us make the survey better, I am going to ask you to work on these questions in a way that may be different from what you are used to. Instead of going through the questions quietly, I want you to tell me what you are thinking as you are trying to figure out the answer to the questions. We call this "thinking-aloud" because we would like you to say everything that you are thinking out loud as you answer the questions. Saying what you are thinking is extremely important to us because it will help us make sure that the questions we are asking are as clear and understandable as they can be. In a moment, I will give you an example of the think-aloud process. Then, I will give you a chance to practice it.

Before we begin, I want to reassure you that we will keep the information you give us confidential. The interview is for research purposes only, and none of the answers you provide will be shared with anyone other than our research team.

I will not be evaluating your answers, and no one will know that it was you who answered these questions. There is no right or wrong answer. The goal is to see whether the survey materials and questions are clear and understandable, and I need your help to do this.

If at any time you decide you do not want to go on, that is your choice, and you may stop.

This interview is being observed by my colleagues, who will be taking notes about your comments. In addition, the interview will also be recorded, so we can review the tapes later. No one else will hear or review the tapes, except for the researchers on this project.

We will work together for about 90 minutes.

Do you have any questions?

Okay, let's begin.

Think-Aloud Demonstration and Practice:

I'm now going to show you how to think out loud. When I am finished, you will get a chance to practice answering a question thinking aloud. Since we can't tell what is going on in your brain and what you're thinking as we read these questions to you, we need you to "think aloud."

Let me give you an example (*Demonstrate think-aloud with example 1*).

The point of the think-aloud is not to describe what you are doing or to tell me what you plan to do. Just say aloud whatever words and thoughts come into your head.

If I don't hear you speaking, I'll ask you to keep talking. I'm telling you that now so you won't think I am criticizing the way you are working. I need to hear when you are confused, and determine what is confusing you, and when you understand what you are reading or are being asked to do.

Now you will do a think-aloud practice. I'm going to give you a simple survey item. First, I will read it out loud, and then I will listen for your response. Please try to think aloud as you figure out your answer. Remember to say out loud **whatever** you are thinking.

Example 1:

When you are hungry in the afternoon, which of the following choices would you consider buying from a vending machine? (Please check all that apply)

☐ Chocolate Bar

☐ Potato Chips

☐ Granola Bar

☐ Animal Crackers

☐ Pretzels

☐ Soda

Other _____ (Specify)

Example 2:

How many windows are in your home? _____

Next, I would like to show you some communication materials we will be using during his study. As part of the survey process, we will be sending out a pre-notification letter to tell residents about the study. I have a draft of the letter here.

[Place prenotification letter (ITEM A) in front of respondent]

<i>Could you please take a moment and read this letter?</i> <i>Although this is not a survey question, we'd still like to hear your thoughts.</i> <i>Remember to think aloud as you read this letter. Let me know when you are finished.</i>	In your own words, can you tell me what you think this letter is saying? Was there anything about this letter that you found difficult to understand or unclear? Were there any words you didn't understand? Record problematic words: Based on what you read, what do you think will happen during this study? What options are available to express your interest in participating in this study? IF NEEDED, FOLLOW UP: What is this for <i>[point to unique ID]</i>?
---	---

ITEM A



<DATE>

<NAME>

<ADDRESS 1>

<ADDRESS 2>

<City>, <State>, <Zip>

Dear <insert name>,

The U. S. Consumer Product Safety Commission (CPSC) has asked EurekaFacts, a survey research company, to conduct a nationwide survey about household fire and carbon monoxide (CO) safety. The survey is very important and will help the CPSC improve home safety and save lives.

We would like to ask you to support this initiative by completing the survey. In the coming weeks, you may receive a phone call from EurekaFacts, from the number <NUMBER>, asking you to take part in a brief in-home interview. Please take a few minutes to respond and find out more about this study. Your experiences and thoughts on the topic are extremely valuable for this effort.

You've been specifically chosen as someone from whom we'd like to hear. Your household was selected at random from a list of households across the country that represent different regions and types of homes. Participation in this survey is voluntary and your responses will be maintained confidential and anonymous. If your home is selected for a visit you will be eligible to receive a \$50 gift card (from a major credit card company).

If you are interested in participating in this study, please go to the website <INTAKE WEB ADDRESS>

and enter your unique ID: [abc123]

Or you can call EurekaFacts at the toll-free-number <NUMBER>. To learn more about this study, please visit <WEBSITE>.

Thank you for your willingness to participate in this important survey.

Sincerely,

EurekaFacts, LLC on behalf of the
U.S. Consumer Product Safety Commission

I have another item I would like to share with you. Before scheduling the interview, members from our call center will telephone potential participants. During this call, the call center representatives will read from a script, which will explain the study. We'd like your assistance in making sure that this script is clear and understandable. I am going to read the script to you now, and when I am finished, I will follow up with some questions regarding the script. Are you ready?

[Read script (ITEM B) to respondent]

<i>Directions</i> 4. <i>[Read Introduction from Item B. Once finished, stop and read #2.]</i> <i>Before we continue, I do want to ask:</i> <i>[Read from Introduction section of probes]</i> 5. <i>Now we would ask some questions to determine whether you are eligible.</i> <i>[Read If Eligible from Item B. Once finished, read If Eligible section of probes.]</i> 6. <i>[Read overall probes]</i>	Introduction Can you tell me what you think this part is telling you? Was there anything about this script that you found difficult to understand or unclear? Were there any words you didn't understand? Record problematic words: If Eligible Can you tell me what you think this part is telling you? Was there anything about this script that you found difficult to understand or unclear? Were there any words you didn't understand? Record problematic words: Overall Overall, can you tell me what you think this script is telling you? IF NEEDED, FOLLOW UP: Could you please share with me what you think will happen during
--	---

	the interview? IF NEEDED, FOLLOW UP: What do you think will happen to the smoke and carbon monoxide alarms in the home? IF NEEDED, FOLLOW UP: How long will the interview last? Are there any incentives provided for participation? If yes, what is it?
--	--

Great. That is all the communication items we have for you. Now we will go on to some of the survey questions.

ITEM B

INTRODUCTION

Hello, my name is [NAME] from EurekaFacts, a survey research company in Rockville, MD. EurekaFacts, on behalf of the U.S. Consumer Product Safety Commission (CPSC), is conducting an important nationwide survey on household fire and carbon monoxide safety. The survey will help CPSC improve home safety and save lives. Your experiences and thoughts on the topic are extremely valuable for this effort.

May I speak with _____?

The purpose of this survey is to gather information about the functionality of smoke and carbon monoxide (CO) alarms in homes in the United States. If your home does not have any smoke or CO alarms, we are still interested in conducting the survey. Findings from this research will help CPSC with improving home safety. The interview will last no more than **[Survey Length]**, and if you qualify and complete the in-home interview you will receive a \$50 gift card from a major credit card company in appreciation for your participation.

Would you like to hear more about this study?

IF ELIGIBLE

Thank you for answering these questions. You are eligible for the telephone survey.

We are talking with residents about household fire and carbon monoxide safety. The interview will last no more than **[Survey Length]**, and can be done over the phone. In appreciation for your participation, we will mail you a \$25 gift card from a major credit card company.

Your responses to this survey will be kept completely confidential and your information will not be shared with anyone other than the EurekaFacts researcher team. Any information provided to the CPSC will be reported as group data with no identifying information.

[Question 4a - Version 1]

4a. Do you have any smoke alarms in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
☐ No
☐ Don't know

<i>Q4: As we work together, I will be reading each question aloud, and record your response along with any think-aloud comments</i> <i>Once you are finished answering the question, I'll follow up with some questions that will help us know whether the questions are clear and understandable.</i>	In your own words, can you tell me what you think this question was asking? Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? IF R SELECTS DON'T KNOW I noticed you selected Don't Know, in response to this question. How do you think we could word the question or describe the alarm in a way that would assist you with determining whether there is an alarm in the home? <i>[Show question to respondent]</i> In this question, what does the term "smoke alarm" <i>[point to term]</i> mean to you?
<i>OK, please listen as I read this question, and then tell me your response.</i> <i>Remember to think-aloud when providing your response.</i>	IF NEEDED, FOLLOW UP: Is there another term you would use for "smoke alarm," in this context? Tell me what you were thinking when I asked about "uninhabited outbuildings or apartment hallways." <i>[point to item]</i> IF NEEDED, FOLLOW UP: Could you provide an example?

[Read the alternative version of the item to the participant and ask them the following]:

After hearing both versions: Do you find one of these two questions easier to answer? If so, which one and why?

☐ Version 1

☐ Version 2

☐ Same

Which term is more familiar to you, “smoke *alarm*” or “smoke *detector*”?

☐ Alarm

☐ Detector

☐ Neither

Do you think there is a difference between an “alarm” and a “detector”?
FOLLOW UP: How do you think they are (the same or different)?

[Question 4a - Version 1]

4a. Do you have any smoke alarms in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
- ☐ No
- ☐ Don't know

[Question 4a - Version 2]

4a. Do you have any smoke detectors in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
- ☐ No
- ☐ Don't know

[Question 4b – Version 1]

4b. Are any of your smoke alarms connected to a central alarm or security system that notifies the police or fire department?

- ☐ Yes
☐ No
☐ Don't Know

Q 4b: Please listen as I read the question, and then tell me your response.

Remember to think aloud when providing your response.

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or was not clear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Could you please tell me what you were thinking about when I asked about a smoke alarm that is "connected to a central alarm or security system?" *[point to term]*

IF NECESSARY: Could you provide an example?

IF R SELECTS YES IN Q4b

You said "Yes" in Q4b. How do you know that the smoke alarm is connected to a central alarm or security system?

IF R SELECTS DON'T KNOW IN Q4b

You said "Don't know." For what reasons did you provide this response?

IF NECESSARY: Do you not know whether your alarm is attached to a

	central alarm or security system, or are you unfamiliar with what is central alarm or security system is? _____ _____ _____ How might someone know that their smoke alarm is connected to a central alarm or security system? _____ _____ <i>[Read the alternative version of the item to the participant and ask them the following]:</i> Looking at both versions, do you find one of these two questions easier to answer? If so, which one and why? ☐ Version 1 ☐ Version 2 ☐ Same _____ _____ Does the explanation in this version [<i>point to version 2</i>] help you with understanding the question? Would you have answered the question differently if it were initially included? _____ _____
--	---

[Question 4b – Version 1]

4b. Are any of your smoke alarms connected to a central alarm or security system that notifies the police or fire department?

- ☐ Yes
- ☐ No
- ☐ Don't Know

[Question 4b – Version 2]

4b. Are any of your smoke alarms connected to a central alarm or security system that notifies the police or fire department? What we mean by this is, if the smoke alarm detected smoke, it would automatically notify the police or fire department.

- ☐ Yes
- ☐ No
- ☐ Don't Know

4c. Has the police or fire department ever arrived at your residence for a fire- or smoke-related incident and informed you that they are responding to a notification they received from a central alarm or security system?

- ☐ Yes
☐ No
☐ Never had a fire or smoke-related incident

4d. On a scale of 1 to 5, where 1 is “Not at All Safe,” and 5 is “Extremely Safe,” to what extent do you believe your home is safe with the current smoke alarms?

1 2 3 4 5 DK RF

<i>Q4c - 4d: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your responses.</i> <i>[After Q 4c, read Q 4c probes]</i> <i>[After Q 4d, read Q 4d probes]</i>	Question 4c In your own words, can you tell me what you think this question was asking? Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? Record problematic words: Question 4d What does the word “safe” mean to you as it is used in this question? How easy or difficult was it to provide an answer? [If difficult] Could the question be worded differently to make it easier to answer? If so, how?
---	--

[Question 5a - Version 1]

5a. Do you have any carbon monoxide alarms in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
☐ No
☐ Don't know

Q5a: Please listen as I read the question, and then tell me your response.

Remember to think aloud when providing your response.

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

What does the word "carbon monoxide alarm" mean to you as it's used in this question?

[Read the alternative version of the item to the participant and ask them the following]:

After hearing both versions, do you find one of these two questions easier to answer? If so, which one and why?

☐ Version 1 ☐ Version 2 ☐ Same

Which term is more familiar to you, "carbon monoxide *alarm*" or "carbon monoxide *detector*"?

☐ Alarm ☐ Detector ☐ Neither

[Question 5a - Version 2]

5a. Do you have any carbon monoxide detectors in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
- ☐ No
- ☐ Don't know

6. **Do you or another household member own or rent your home?**
- ☐ Own
- ☐ Rent
- ☐ Don't know
- ☐ Refused
7. **How long have you lived in this (apartment/house)? Would that be . . . (READ LIST)**
- ☐ Less than 6 months
- ☐ 6 to 11 months
- ☐ 1 to 5 years
- ☐ 6 to 10 years
- ☐ 11 years or more
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)
8. **Please tell me to the best of your knowledge, in what year was this (apartment/house) built? Was it . . . (READ LIST)**
- ☐ 2010 or later
- ☐ Between 2000 and 2009
- ☐ Between 1990 and 1999
- ☐ Between 1980 and 1989
- ☐ Before 1980
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

<i>Q 6 - 8: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your responses.</i>	Were any of the questions difficult to answer?
	Were there any words that you did not understand?
	Record problematic words:
	For question 7, how easy or difficult was it to remember how long you have lived in your residence?
	For question 8, how easy or difficult was it to remember what year your residence was built?

--	-------

9a. Does this residence have an attached garage?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

9b. For what purposes is the attached garage used? Would you say . . . (READ LIST, SELECT ALL THAT APPLY)

- ☐ Workshop/workspace
- ☐ Store tools or lawn/sports equipment
- ☐ Store vehicle(s) (e.g., motorcycle, car, SUV, van)
- ☐ Fuel-burning appliances (e.g., furnace, water heater, grill)
- ☐ Other (Specify)_____
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

9c. What type of fuel-burning appliances, if any, do you use in your home? (READ LIST, SELECT ALL THAT APPLY)

- | | |
|--|---|
| ☐ Gas-powered generator | ☐ Wood- or pellet-burning fireplace |
| ☐ Furnace or boiler | ☐ Other (Specify)_____ |
| ☐ Water heater | ☐ Do not own any fuel-burning appliances |
| ☐ Charcoal grill | ☐ Don't know (DON'T READ) |
| ☐ Wood- or pellet-burning stove | ☐ Refused (DON'T READ) |

INTERVIEWERS, PLEASE NOTE:

Ask respondent to answer the questions that may not apply. Some questions may not apply. Although the item may not apply, we are still interested in understanding whether the question and its response options are clear and understandable. Additionally, we would like to see whether the response options are inclusive, and mutually exclusive.

Q 9a – 9c: Please listen as I read these questions, and then tell me your response after each question.

Remember to think aloud when providing your response.

[After Q 9a, read Q 9a probes]

[After Q 9b, read Q 9b probes]

[After Q 9c, read Q 9c probes]

Question 9a

In your own words, can you tell me what you think this question was asking?

IF NEEDED: Could you please tell me what you were thinking when I asked about “attached garage.”

Question 9b

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn’t understand?

Record problematic words:

[Show question to respondent]

Did all of the options make sense to you in this question?

For this question, can you think of any other purposes that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

Question 9c

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or was not clear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Did all of the options make sense to you in this question?

For this question, do you think there any other types of fuel-burning appliances that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

9b. For what purposes is the attached garage used? Would you say . . . (READ LIST, SELECT ALL THAT APPLY)

- ☐ Workshop/workspace
- ☐ Store tools or lawn/sports equipment
- ☐ Store vehicle(s) (*e.g.*, motorcycle, car, SUV, van)
- ☐ Fuel-burning appliances (*e.g.*, furnace, water heater, grill)
- ☐ Other (Specify)_____
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

9c. What type of fuel-burning appliances, if any, do you use in your home? (READ LIST, SELECT ALL THAT APPLY)

- | | | | |
|--------------------------|-------------------------------|--------------------------|--|
| ☐ | Gas-powered generator | ☐ | Wood- or pellet-burning fireplace |
| ☐ | Furnace or boiler | ☐ | Other (Specify)_____ |
| ☐ | Water heater | ☐ | Do not own any fuel-burning appliances |
| ☐ | Charcoal grill | ☐ | Don't know (DON'T READ) |
| ☐ | Wood- or pellet-burning stove | ☐ | Refused (DON'T READ) |

10. Do you know how to . . .

	Yes	No	Don't know	Refused
c. Install a smoke alarm?	☐	☐	☐	☐
d. Maintain a smoke alarm in good working order?	☐	☐	☐	☐

Q 12a- 12b: Please listen as I read these questions, and then tell me your response after each question.

Remember to think aloud when providing your response.

Question 12b

In your own words, can you tell me what you think this question was asking?

How would someone “maintain” a smoke alarm? Could you provide some examples?

What does the phrase “good working order” mean to you as it’s used in this question?

Were any of the questions difficult to answer?

Were there any words that you did not understand?

Record problematic words:

11a. In the past 12 months, have you had any accidental fires—that is, unintended or unwanted smoke or flames in your home or on your property? Please include fires that were too small to call the fire department.

- ☐ Yes
☐ No
☐ Don't know
☐ Refused

Q 14a: Please listen as I read the question, and then tell me your response.

Remember to think aloud when providing your response.

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

What does the term "accidental fire" mean to you as it is used in this question? *[point to term]*

Tell me what you were thinking about when I asked about "accidental fire."

PROBE IF NECESSARY: Could you provide some examples?

14a. In the past 12 months, have you had any accidental fires—that is, unintended or unwanted smoke or flames in your home or on your property? Please include fires that were too small to call the fire department.

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

16. How would you know if elevated levels of carbon monoxide (CO) were present in your home? (DO NOT READ LIST, SELECT ALL THAT APPLY).

- ☐ You can smell it
- ☐ You can taste it
- ☐ You can see it
- ☐ You can feel it
- ☐ carbon monoxide alarm
- ☐ Other (Specify)_____
- ☐ Respondent does not believe there is a way to know if CO is present
- ☐ Don't know
- ☐ Refused

17. How familiar are you with carbon monoxide alarms? (READ LIST)

- ☐ Not at all familiar
- ☐ Not very familiar
- ☐ Somewhat familiar
- ☐ Very familiar
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

<i>Q 16 - 17: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your response.</i>	Question 16 In your own words, can you tell me what you think this question was asking? _____ _____ _____ Was there anything about this question that you found difficult to understand or was unclear? Were there any words you didn't understand? _____ _____ Record problematic words: _____ _____ <i>[Show question to respondent]</i> What does the term "carbon monoxide" <i>[point to term]</i> mean to you as it's used in this question? _____ _____ What does the phrase "elevated levels of carbon monoxide" <i>[point to phrase]</i>
---	---

mean to you as it's used in this question?

Is there a different way you would say that?

Were there any other reasons that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE, ASK: Is that all?

PROBE: For what reasons did you select only one response?

Question 17

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record Problematic words:

16. How would you know if elevated levels of carbon monoxide (CO) were present in your home? (DO NOT READ LIST, SELECT ALL THAT APPLY).

- ☐ You can smell it
- ☐ You can taste it
- ☐ You can see it
- ☐ You can feel it
- ☐ carbon monoxide alarm
- ☐ Other (Specify)_____
- ☐ Respondent does not believe there is a way to know if CO is present
- ☐ Don't know
- ☐ Refused

24. In the past 12 months, have any of your friends, relatives, neighbors, or coworkers experienced . . .

	Yes	No	Don't know	Refused
c. An accidental fire?	☐	☐	☐	☐
d. A carbon monoxide incident? (e.g., effects of carbon monoxide poisoning)	☐	☐	☐	☐

Q 24a- 24b: Please listen as I read these questions, and then tell me your response after each question.

Remember to think aloud when providing your response.

.

Were any of the questions difficult to answer?

Were there any words that you did not understand?

Record problematic words:

Question 24b

[Show question to respondent]

Please tell me what you were thinking when I asked about “carbon monoxide incident.”

Please tell me what you were thinking when I asked about “effects of carbon monoxide poisoning.”

If appropriate, probe:

Could you describe any symptoms of the effects of carbon monoxide poisoning?

Does the example in 24b help you understand the question? Would you answer the question differently if the example was removed? *[point to explanation]*

--	--

24. In the past 12 months, have any of your friends, relatives, neighbors, or coworkers experienced . . .

	Yes	No	Don't know	Refused
c. An accidental fire?	☐	☐	☐	☐
d. A carbon monoxide incident? (<i>e.g.</i> , effects of carbon monoxide poisoning)	☐	☐	☐	☐

29. On a scale of 1 to 5, where 1 is “Not at All Necessary,” and 5 is “Extremely Necessary,” how necessary do you feel it is to have smoke alarms installed in your home?

1 2 3 4 5 DK RF

<i>Q29: Please listen as I read the question, and then tell me your response.</i> <i>Remember to think aloud when providing your response.</i>	In your own words, can you tell me what you think this question was asking? Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? How easy or hard was it to select an answer? Record problematic words:
--	--

30. Can you tell me some of the reasons why you don't have a smoke alarm installed in your home? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Don't think I need one
- ☐ Did not come with residence
- ☐ They are a nuisance
- ☐ They did not or don't work
- ☐ Never got around to replacing previous alarms
- ☐ It is the landlord's responsibility
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

Q30: Please listen as I read the question, and then tell me your response.

Remember to think aloud when providing your response.

In your own words, can you tell me what you think this question was asking?

Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

In this list, what does the word "nuisance" mean to you?

IF NECESSARY, ASK: Could you provide an instance where an alarm would be a nuisance when they go off?

Were there any other reasons someone may not have a smoke alarm installed in their home that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

	PROBE: For what reasons did you select only one response?
--	--

34a. In the past 12 months, have you sought out any information about fire and carbon monoxide safety?

- ☐ Yes
☐ No
☐ Don't know
☐ Refused

34b. Where do you obtain information about fire and carbon monoxide safety? (READ LIST, SELECT ALL THAT APPLY)

Interviewer: First collect information related to fire safety, then carbon monoxide safety

Sources of information	Fire safety	Carbon monoxide safety
News and media like TV news, newspaper, or radio	☐	☐
Online websites	☐	☐
Family or close friends	☐	☐
Community or religious organizations	☐	☐
Social media like Facebook, Twitter, or Blogs	☐	☐
Local fire department	☐	☐
None of these (DON'T READ)	☐	☐
Don't know (DON'T READ)	☐	☐
Refused (DON'T READ)	☐	☐

INTERVIEWERS, PLEASE NOTE:

Ask respondent to answer the questions that may not apply. Some questions may not apply. Although the item may not apply, we are still interested in understanding whether the question and its response options are clear and understandable. Additionally, we would like to see whether the response options are inclusive, and mutually exclusive.

<i>Q34a – 34b: Please listen as I read these questions, and then tell me your response after each question.</i> <i>Remember to think aloud when providing your responses.</i>	Question 34a In your own words, can you tell me what you think this question was asking? Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?
---	--

[After Q 34a, ask Q 34a probes]

[After Q 34b, ask Q 34b probes]

Record problematic words:

Question 34b

In your own words, can you tell me what you think this question was asking?

c) Where do you obtain information about fire safety?

d) Where do you obtain information about carbon monoxide safety?

Was there anything about this question that you found difficult to understand or was not clear? Were there any words you didn't understand?

Record problematic words:

[Show question to respondent]

Were there any other sources that should be provided in this list?

IF R SELECTS ONLY ONE RESPONSE ASK: Is that all?

PROBE: For what reasons did you select only one response?

34b. Where do you obtain information about fire and carbon monoxide safety? (READ LIST, SELECT ALL THAT APPLY)

Sources of information	Fire safety	Carbon monoxide safety
News and media like TV news, newspaper, or radio	☐	☐
Online websites	☐	☐
Family or close friends	☐	☐
Community or religious organizations	☐	☐
Social media like Facebook, Twitter, or Blogs	☐	☐
Local fire department	☐	☐
None of these (DON'T READ)	☐	☐
Don't know (DON'T READ)	☐	☐
Refused (DON'T READ)	☐	☐

35. How often do you or another member of the household cook at home? Does a member of this household cook . . . (READ LIST)

- ☐ Never
- ☐ Less than once a month
- ☐ A few times per month
- ☐ A few times per week
- ☐ Every day
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

<i>Q35: Please listen as I read the question, and then tell me your response.</i> <i>Remember to think aloud when providing your response.</i>	In your own words, can you tell me what you think this question was asking?
	Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand?
	Record problematic words:
	What does the word "cook" mean to you as it is used in this question?
	Tell me what you were thinking when I asked about cooking at home.
	PROBE: Could you provide some examples of cooking?

Great! To ensure that we interview a broad mix of residents, I have a few brief demographic questions to ask about you and others within this household. It should only take a few minutes of your time.

36. Including yourself, how many people live or stay in your household? This can include:

- Anyone who is living or staying there for more than 2 months
- Yourself, if you are living there for more than 2 months
- Anyone else staying here, who does not have another place to stay, even if they are there for 2 months or less

Please do not include anyone who is living somewhere else for more than 2 months, such as a college student living away, or someone in the Armed Forces on deployment.

Enter number **of people** _____

37. Thinking of the individual(s) who live here, is there anyone . . .

	Yes	No	Don't know	Refused	If yes, how many?
Under 5 years old?	☐	☐	☐	☐	
5-17 years old?	☐	☐	☐	☐	
18-64 years old?	☐	☐	☐	☐	
65 years old, or older?	☐	☐	☐	☐	

<i>Q 36 – 37: And finally, I have a couple more questions to share with you. But before I get to those questions, I want to read an introduction to those questions, and then hear your thoughts.</i> <i>[Once the respondent had provided his or her interpretation of the instructions, give the following</i>	Record issues with introduction:

	Question 36
	In your own words, can you tell me what you think this question was asking?

	Was there anything about this question that you found difficult to understand or was not clear? Were there any words you didn't understand?

	Record problematic words:

	How did you come up with that answer?

<i>directions]</i> <i>Great. Now, please listen as I read the questions, and then tell me your response.</i> <i>Remember to think aloud when providing your response.</i> <i>[After Q 36, read Q 36 probes]</i> <i>[After Q 37, read Q 37 probes]</i>	How easy or difficult was it to provide an answer? [If difficult] Could the question be worded differently to make it easier to answer? If so, how? PROBE: Thinking of families you know who may • have a larger household, • or less stable living circumstances, how easy or difficult do you think it may be for them to answer this question? Question 37 Was there anything about this question that you found difficult to understand or unclear? Were there any words you didn't understand? Record problematic words:
--	--

Appendix C: CPSC Survey on Usage and Functionality of Smoke Alarms and Carbon Monoxide Alarms in Households

Interviewer:

Do not read aloud the “Don’t know” or “Refused” options at any time during the interview. Only record this option if the respondent provides an answer of “Don’t know” or “Refused. If the respondent indicates “Don’t know” or “Refused” the answer to a question, mark the appropriate answer or fill in “DK” in the space provided.

Section A should be completed by the surveyor before entering the residence. Once contact has been made with the resident, the surveyor should begin collecting information from the respondent.

A. RESPONDENT INFORMATION

Date of visit: _____

Name of surveyors making the visit: _____

Name of occupant: _____

Street address: _____ Apt. #: _____

City and state: _____ ZIP _____

Home phone: _____

**IF THE ANSWER TO A QUESTION IS “0” OR “NONE,” ENTER “0.”
Do not leave the answer blank, please.**

Time visit started: _____

1a. What is the type of home in which the resident resides?

- ☐ Single-Family Detached Housing
- ☐ Mobile/Other Manufactured Housing
- ☐ Trailer/RV
- ☐ Apartment/Condominium (GO TO 1b)
- ☐ Single-Family Attached Housing (e.g., townhouse, rowhouse)
- ☐ Other (Specify) _____

Code to enter building

<Display apartment code>

**If Q1a = 4, CONTINUE
ELSE, SKIP TO PREAMBLE**

Introduction to get into apartment building

The following script is to be read if there is a front desk concierge. If there is no front desk concierge present, skip script, and proceed to appointment.

“Hello. We are with EurekaFacts, an independent research firm, conducting research on behalf of the Consumer Product Safety Commission (CPSC).”

Show them your EurekaFacts-provided identification and credentials.

“Part of our research requires us to interview a resident of this building. We spoke with the property manager before coming here.”

1b. Do we have permission to enter the building?

- ☐ Yes (PROCEED TO RESIDENCE)
☐ No (SKIP TO Q3a)

If refused entry, say thank you, and terminate.

B. SURVEY INFORMATION

Suggested Preamble to get in the door--surveyors can alter, as applicable):

“Hello. I am a firefighter/Red Cross volunteer [First and Last Name] from [your [XYZ] fire department/ [Organization], and this is [First and Last Name] from an independent research firm, EurekaFacts.”

Show them fire department or American Red Cross credentials, preferably not a badge. Have copies of letters endorsing the survey from the local fire department, CPSC, and/or American Red Cross, if needed.

“We are conducting a nationwide survey on household safety for the U.S. Consumer Product Safety Commission (CPSC). The survey is very important and will help the CPSC improve home safety. We called earlier and discussed this study with [Name] from this residence, and scheduled a visit for today.”

2a. Is [Name of respondent previously contacted] available to speak with us?

- ☐ Yes (CONTINUE WITH PREAMBLE)
☐ No

2b. Is there another person available we may speak with, who is 18 years or older, and may be considered one of the heads of the household?

- ☐ Yes
☐ No (TERMINATE)

If respondent is not available: *When would be a good time to reach them?*

Terminate: *Thank you for speaking with us today. Unfortunately, we need to speak with an adult who can answer questions regarding the home. Have a nice day.*

“We are asking people in your community a few questions about their smoke and carbon monoxide alarms, and we are doing some simple tests to make sure the alarms work properly. If the batteries in your alarm need to be replaced, we have new batteries to give out, free of charge. Additionally, if any of your alarms do not work, we have new ones to replace them, again free of charge. As you probably know, properly operating smoke alarms can help protect you and your family in the event of a fire. In addition, properly operating carbon monoxide alarms can help protect you in the event of carbon monoxide poisoning. We would like to collect any alarms that don’t work and send them to the Consumer Product Safety Commission’s lab to find out why they don’t work. This interview will take up to 60 minutes, and at the end of the interview, we will provide you with a \$50 gift card in appreciation for your participation.

“Before we begin, we’d like for you to review a consent form with information about the study.”

Pull up the informed consent form, and hand the tablet to the respondent.

“This is the informed consent form. It explains the reason for our visit today. Could you please read this, and if you agree to allow this interview to proceed, please sign the bottom. Let me know if you have any questions.

If participant refused, say thank you, and terminate

3a. If entry to residence was not possible, what was the main reason?

- ☐ Participant refused (TERMINATE)
☐ Participant rescheduled (GO TO Q3b)
☐ Refused entry to building (TERMINATE)
☐ No one home (TERMINATE)
☐ Only a minor was home (TERMINATE)
☐ Vacant/commercial home/lot—bad address (TERMINATE)
☐ Language barrier (TERMINATE)
☐ Occupant refused entry (Why?) _____
☐ Other (Specify) _____

3b. If participant rescheduled, please fill out the following information

Date
Time

Contact information

“Let’s begin.”

4a. Do you have any smoke alarms in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
☐ No (SKIP TO 5a)
☐ Don’t know (ASK TO INSPECT. IF “YES” CONTINUE, BUT IF “NO,” TREAT AS “NO” SMOKE ALARM)

4b. Are any of your smoke alarms connected to a central alarm or security system that notifies the police or fire department?

[If needed: What we mean by this is if the smoke alarm detected smoke, it would automatically notify the police or fire department.]

- ☐ Yes (SKIP TO 4d)
☐ No (SKIP TO 5a)
☐ Don’t Know (CONTINUE)

4c. Has the police or fire department ever arrived at your residence for a fire or smoke related incident and informed you that they are responding to a notification they received from a central alarm or security system?

- ☐ Yes
☐ No
☐ Never had a fire- or smoke-related incident

**IF 4b = 1 or 4c = 1 or 3 CONTINUE
ELSE, SKIP TO 5a**

4d. On a scale of 1 to 5, where 1 is “Not at All Safe” and 5 is “Extremely Safe,” to what extent do you believe your home is safe with the current smoke alarms?

1 2 3 4 5 DK RF

5a. Do you have any carbon monoxide alarms in your home? When considering whether you do, please do not include any uninhabited outbuildings or apartment hallways.

- ☐ Yes
☐ No (SKIP TO Q6)
☐ Don’t know (ASK TO INSPECT. IF “YES,” CONTINUE, BUT IF “NO,” TREAT AS “NO” CO ALARM)

5b. Are any of your carbon monoxide alarms connected to a central alarm or security system that notifies the police or fire department?

[If needed: What we mean by this is if the carbon monoxide alarm detected carbon monoxide, it would automatically notify the police or fire department.]

- ☐ Yes (SKIP TO Q5d)
- ☐ No (SKIP TO Q6)
- ☐ Don't Know (CONTINUE)

5c. Has the police or fire department ever arrived at your residence for a carbon monoxide-related incident and informed you that they are responding to a notification they received from a central alarm or security system?

- ☐ Yes
- ☐ No
- ☐ Never had a carbon monoxide-related incident

**IF 5b = 1 or 5c = 1 or 3, CONTINUE
ELSE, SKIP TO 6**

5d. On a scale of 1 to 5, where 1 is "Not at All Safe" and 5 is "Extremely Safe," to what extent do you believe your home is safe with the current carbon monoxide alarms?

1 2 3 4 5 DK RF

6. Do you or another household member own or rent your home?

- ☐ Own
- ☐ Rent
- ☐ Don't know
- ☐ Refused

7. How long have you lived in this (apartment/ house)? Would that be . . . (READ LIST)

- ☐ Less than 6 months
- ☐ 6 to 11 months
- ☐ 1 to 5 years
- ☐ 6 to 10 years
- ☐ 11 years or more

- ☐ Don't know (DON'T READ)
☐ Refused (DON'T READ)

8. Please tell me to the best of your knowledge, in what year was this (apartment/house) built? Was it . . . (READ LIST)

- ☐ 2010 or later
☐ Between 2000 and 2009
☐ Between 1990 and 1999
☐ Between 1980 and 1989
☐ Before 1980
☐ Don't know (DON'T READ)
☐ Refused (DON'T READ)

If Q1a = 1, CONTINUE

ELSE, SKIP TO 10a

9a. Does this residence have an attached garage?

- ☐ Yes
☐ No (SKIP TO Q10a)
☐ Don't know (SKIP TO Q10a)
☐ Refused (SKIP TO Q10a)

9b. For what purposes is the attached garage used? Would you say . . . (READ LIST, SELECT ALL THAT APPLY)

- ☐ Workshop/workspace
☐ Store tools or lawn/sports equipment
☐ Store vehicle(s) (*e.g.*, motorcycle, car, SUV, van)
☐ Fuel burning appliances (*e.g.*, furnace, water heater, grill)
☐ Other (Specify) _____
☐ Don't know (DON'T READ)
☐ Refused (DON'T READ)

9c. What type of fuel-burning appliances, if any, do you use in your home? (READ LIST, SELECT ALL THAT APPLY)

- | | |
|---|---|
| ☐ Gas powered generator | ☐ Wood or pellet burning fireplace |
| ☐ Furnace or boiler | ☐ Other (Specify) _____ |
| ☐ Water heater | ☐ Do not own any fuel-burning appliances |
| ☐ Charcoal grill | ☐ Don't know (DON'T READ) |
| ☐ Wood or pellet burning stove | ☐ Refused (DON'T READ) |

IF Q4a = 2 or 3 SKIP TO Q12

ELSE, CONTINUE

SMOKE ALARM

10a. About how often is the smoke alarm or alarms tested in your home? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Once every few years (SKIP TO Q11a)
- ☐ Every year (SKIP TO Q11a)
- ☐ Every 7–11 months (SKIP TO Q11a)
- ☐ Every 2–6 months (SKIP TO Q11a)
- ☐ Every month (SKIP TO Q11a)
- ☐ Every week (SKIP TO Q11a)
- ☐ Other (Specify) _____ (SKIP TO Q11a)
- ☐ Don't know (SKIP TO Q11a) (DON'T READ)
- ☐ Refused (SKIP TO Q11a) (DON'T READ)

10b. Please tell me some of the reasons why you have not tested your smoke alarm or alarms? (DO NOT READ LIST, SELECT ALL THAT APPLY):

- ☐ Did not know you should test
- ☐ Did not think it was important enough
- ☐ Did not know how to test (SKIP Q10c)
- ☐ Don't need to test because they go off occasionally
- ☐ Physically unable to reach
- ☐ Other (Specify) _____
- ☐ Don't know
- ☐ Refused

10c. Do you know how to test your smoke alarm or alarms?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

11a. Do you think most or all of your smoke alarms are working? By working, I mean they would make a sound if they detected smoke right now.

- ☐ Yes (SKIP to 12a)
- ☐ No
- ☐ Don't know (SKIP TO Q12a)
- ☐ Refused (SKIP TO Q12a)

11b. What are some of the reasons your smoke alarms may not be working? Again, by working, I mean they would make a sound if it detected smoke right now. (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Did not get around to fixing it
- ☐ Do not know how to fix or replace it
- ☐ Unable to install or fix it

- ☐ Unable to afford new ones
- ☐ Disconnected it (GO TO Q11c)
- ☐ It is the landlord's responsibility
- ☐ Removed battery (GO TO Q11d)
- ☐ Batteries never installed
- ☐ Batteries not working and not yet replaced
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

11c. You mentioned that one or more of your smoke alarms was disconnected. For what reason(s) were the smoke alarms disconnected? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Nuisance when they go off
- ☐ Alarm frequently went off
- ☐ Would not stop beeping/chirping
- ☐ No longer worked
- ☐ No reason in particular
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

11d. You mentioned that the batteries were removed from one or more of your smoke alarms. For what reason(s) were the batteries removed from the smoke alarm or alarms? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Batteries no longer worked
- ☐ Batteries were leaking/discharge
- ☐ Batteries expired
- ☐ Alarm would not stop beeping/chirping
- ☐ Intended to replace batteries, but forgot to install new ones
- ☐ Installed wrong type of batteries
- ☐ Needed batteries for another device
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

12. Do you know how to . . .

	Yes	No	Don't know	Refused
a. Install a smoke alarm?	☐	☐	☐	☐
b. Maintain a smoke alarm in	☐	☐	☐	☐

good working order?				
---------------------	--	--	--	--

**IF Q4a = 2 or 3 SKIP TO Q14a
ELSE, CONTINUE**

13. To the best of your knowledge, how often should you replace the smoke alarms in your home? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Less than 1 year
- ☐ 1–3 years
- ☐ 4–6 years
- ☐ 7–9 years
- ☐ 10 years
- ☐ More than 10 years
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

FIRE HISTORY

14a. In the past 12 months, have you had any accidental fires—that is, unintended or unwanted smoke or flames in your home or on your property? Please include fires that were too small to call the fire department.

- ☐ Yes (CONTINUE)
- ☐ No (SKIP TO Q15a)
- ☐ Don't know (SKIP TO Q15a)
- ☐ Refused (SKIP TO Q15a)

**IF Q4a = 2 or 3 SKIP TO Q16
ELSE, CONTINUE**

If Yes:

14b. Thinking of the most recent accidental fire(s), how did you become alerted to the incident? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Saw the fire
- ☐ Smelled the fire
- ☐ Heard the fire
- ☐ Felt the heat of the fire
- ☐ Smoke alarm (SKIP Q14c)
- ☐ Someone notified me
- ☐ Other (Specify) _____
- ☐ Don't remember
- ☐ Don't know
- ☐ Refused

14c. Thinking of the most recent accidental fire(s), did any of the smoke alarms go off during the fire(s)?

- ☐ Yes (SKIP TO Q15a)
- ☐ No
- ☐ Don't know (SKIP TO Q15a)
- ☐ Refused (SKIP TO Q15a)

14d. Thinking of the most recent accidental fire(s), do you think that enough smoke reached the smoke alarm that it should have sounded?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

15a. In the past 12 months, have any of your smoke alarms gone off when there was no fire, other than when the smoke alarm was being tested?

- ☐ Yes
- ☐ No (SKIP TO Q16)
- ☐ Don't know (SKIP TO Q16)
- ☐ Refused (SKIP TO Q16)

15b. Why do you think the smoke alarm went off when there was no fire? (DO NOT READ LIST, SELECT ALL THAT APPLY).

- ☐ Cooking
- ☐ Fireplace
- ☐ Tobacco
- ☐ Steam from bathroom
- ☐ Low battery
- ☐ Other (Specify) _____
- ☐ No apparent reason
- ☐ Don't know
- ☐ Refused

CO ALARMS

16. How would you know if elevated levels of carbon monoxide (CO) were present in your home? (DO NOT READ LIST, SELECT ALL THAT APPLY).

- ☐ You can smell it
- ☐ You can taste it
- ☐ You can see it
- ☐ You can feel it
- ☐ Carbon monoxide alarm
- ☐ Other (Specify) _____
- ☐ Respondent does not believe there is a way to know if CO is present
- ☐ Don't know
- ☐ Refused

17. How familiar are you with carbon monoxide alarms? (READ LIST)

- ☐ Not at all familiar
- ☐ Not very familiar
- ☐ Somewhat familiar
- ☐ Very familiar
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

**IF Q5a =2 or 3, SKIP TO Q21
ELSE, CONTINUE**

If CO alarms present (Yes in 5a), ask:

18a. About how often do you test your carbon monoxide alarm or alarms? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Once every few years (SKIP TO Q18a)
- ☐ Ever year (SKIP TO Q18a)
- ☐ Every 7–11 months (SKIP TO Q18a)
- ☐ Every 2–6 months (SKIP TO Q18a)
- ☐ Every month (SKIP TO Q18a)
- ☐ Every week
- ☐ Other (Specify) _____
- ☐ Don't know (SKIP TO Q18a) (DON'T READ)
- ☐ Refused (SKIP TO Q18a) (DON'T READ)

18b. What were the reasons that you have not tested your carbon monoxide alarm or alarms? (Open ended, capture their response)

19a. Do you think most or all of your carbon monoxide alarms are working? By working, I mean they would make a sound if it detected carbon monoxide right now.

- ☐ Yes (SKIP TO 20)
- ☐ No
- ☐ Don't know (SKIP TO Q20)
- ☐ Refused (SKIP TO Q20)

If No:

19b. What are some of the reasons your carbon monoxide alarms may not be working? Again, by working, I mean they would make a sound if it detected carbon monoxide right now. (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Did not get around to fixing it
- ☐ Do not know how to fix or replace it
- ☐ Unable to install or fix it
- ☐ Unable to afford new ones
- ☐ Disconnected it (GO TO 19c)
- ☐ It is the landlord's responsibility
- ☐ Removed battery (GO TO 19d)
- ☐ Batteries never installed
- ☐ Batteries not working and not yet replaced
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

19c. You mentioned that one or more of your carbon monoxide alarms was disconnected. For what reason(s) were the carbon monoxide alarms disconnected? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Nuisance when they go off
- ☐ Alarm frequently went off
- ☐ Would not stop beeping/chirping
- ☐ No longer worked
- ☐ No reason in particular
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

19d. You mentioned that the batteries were removed from one or more of your carbon monoxide alarms. For what reason(s) were the batteries removed from the carbon monoxide alarm or alarms? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Batteries no longer worked
- ☐ Batteries were leaking/discharge
- ☐ Batteries expired
- ☐ Alarm would not stop beeping/chirping
- ☐ Intended to replace batteries, but forgot to install new ones
- ☐ Installed wrong type of batteries
- ☐ Needed batteries for another device
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

20. For what reasons do you have a carbon monoxide alarm? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ It is required by law
- ☐ It makes me feel safe
- ☐ It is helpful in detecting carbon monoxide
- ☐ It came with the residence
- ☐ I own generators/fuel-burning appliances
- ☐ Other (Specify) _____
- ☐ Don't know
- ☐ Refused

21. To the best of your knowledge, how often should you replace the carbon monoxide alarms in your home? Would you say . . . (READ LIST)

- ☐ Never
- ☐ Less than 1 year
- ☐ 1–3 years
- ☐ 4–6 years
- ☐ 7–9 years
- ☐ 10 years
- ☐ More than 10 years
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

IF Q5a = 2 or 3, SKIP TO Q24
ELSE, CONTINUE

CO History

22a. In the past 12 months, has your carbon monoxide alarm or alarms ever gone off, other than when the carbon monoxide alarm was being tested?

- ☐ Yes
- ☐ No (SKIP TO Q23)
- ☐ Don't know (SKIP TO Q23)
- ☐ Refused (SKIP TO Q23)

If Yes:

22b. Thinking of the last time your carbon monoxide alarm went off, how did you react when you heard the alarm? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Left the house
- ☐ Called the fire department
- ☐ Ventilated home (opened windows, door, used fan, etc.)
- ☐ Unplugged or disconnected it
- ☐ Reset it
- ☐ Removed battery
- ☐ Other action (Specify) _____
- ☐ Don't remember
- ☐ Don't know
- ☐ Refused

23. Do you know how to . . .

	Yes	No	Don't know	Refused
a. Install a carbon monoxide alarm?	☐	☐	☐	☐
b. Maintain a carbon monoxide	☐	☐	☐	☐

alarm in good working order?				
------------------------------	--	--	--	--

24. In the past 12 months, have any of your friends, relatives, neighbors, or coworkers experienced . . .

	Yes	No	Don't know	Refused
a. An accidental fire?	☐	☐	☐	☐
b. A carbon monoxide incident? (e.g., effects of carbon monoxide poisoning)	☐	☐	☐	☐

-TESTING ALARMS-

Now we'd like to test your alarm(s) to make sure that they are working properly.

25. How many floors (levels) are there in your home? Please include the basement and attic, if you have one.

(NOTE: For an apartment, treat the entire apartment as one floor, unless more than one level. Do NOT report the number of floors in the apartment building.)

Would you show me the first alarm? (Then ask to see the next one)

For each alarm, fill in the following data. The computer will automatically cue up another set of these questions for the second, third, etc. alarms. The first smoke alarm data elements will be numbered 26-1a, 26-1b, 26-1c, etc. The second smoke alarm data elements will be 26-2a, 26-2b, etc. The third alarm will be 26-3a, 26-3b, and so forth.

The questions in this section are to be addressed and answered by the survey team

26-1a. On what level of the home are you currently?

Alarm #	#1	#2	#3	#4	#5	#6
Basement	1	1	1	1	1	1
First level	2	2	2	2	2	2
Second level	3	3	3	3	3	3
Third level	4	4	4	4	4	4
Attic	5	5	5	5	5	5
Other _____	6	6	6	6	6	6

(NOTE: For an apartment, treat the entire apartment as first level, unless more than one level. Do NOT report on what floor of the building the apartment is.)

26-1b. In what area or room of home are you currently?

Alarm #	#1	#2	#3	#4	#5	#6
Inside the bedroom	1	1	1	1	1	1

Hallway outside of bedrooms	2	2	2	2	2	2
Hallway - other	3	3	3	3	3	3
In Family room/Living room	4	4	4	4	4	4
In Kitchen	5	5	5	5	5	5
In Dining area	6	6	6	6	6	6
In Bathroom	7	7	7	7	7	7
In Closet	8	8	8	8	8	8
Other area	9	9	9	9	9	9

26-1c. (READ) What type of alarm is this? Would you say it is a smoke alarm, carbon monoxide alarm, both a smoke and CO alarm, or you don't know?

Alarm #	#1	#2	#3	#4	#5	#6
Smoke alarm	1	1	1	1	1	1
CO alarm	2	2	2	2	2	2
Smoke/CO Combined	3	3	3	3	3	3
Don't know (INSPECT)	4	4	4	4	4	4

IF Q26c = 4

[If "Don't Know"] – Please follow the following steps:

1. Inspect back of alarm for manufacturer information and look for name/type of alarm.
2. If unclear, refer to your Alarm reference sheet. Use either the UL number or model number to identify the type of alarm.

Please select correct type of alarm, if still unknown, continue.

26-1d. (READ) For quality control purposes, we'd like to collect three photographs of this alarm. Do we have your permission?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2
Could not take picture	3	3	3	3	3	3

[If yes] –Please obtain three photographs including the following items:

- Front of alarm (to capture image of alarm)
- Back of alarm (UL and Manufacturer information)
- Side of alarm (may have a install/replacement sticker)

[If no] "Okay. No problem."

IF Q26c = 1, 3, or 4 CONTINUE

ELSE IF Q26c = 2, GO TO INSTRUCTION SET B

26-1e. (OBSERVE) Approximately, what is the distance between the smoke alarm and the stove or cooktop?

Alarm #	#1	#2	#3	#4	#5	#6
Less than 6 feet	1	1	1	1	1	1
6–10 feet	2	2	2	2	2	2
11–20 feet	3	3	3	3	3	3
More than 20 feet	4	4	4	4	4	4

Don't know

5

5

5

5

5

5

IF Q26c = 1, 3, or 4, SHOW INSTRUCTION SET A

ELSE IF Q26c = 2, SKIP 26f, AND GO TO INSTRUCTION SET C

A. INSTRUCTIONS ON TESTING SMOKE ALARM WITH AEROSOL

PROCEED TO FIRST/NEXT DETECTOR – SMOKE TEST

- Using aerosol spray and wand, point tube at detector from a distance of 1–2 feet.
- Spray a three second burst of aerosol, and wait 10 seconds,
- If alarm sounds, testing is complete. Collect identification data.
- If no alarm sounds:
 - Brush to lightly clear the grille and surface of alarm.
 - Spray again for 5 seconds, and wait 10 seconds.
- If alarm does not sound, proceed to instructions on testing using Test Button.

26-1f. (OBSERVE) Did alarm sound in response to this smoke test?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2
Could not test	3	3	3	3	3	3

IF SMOKE ALARM SOUNDS, SKIP TO INSTRUCTION SET D

ELSE, CONTINUE TO BUTTON TEST

B. INSTRUCTIONS ON TESTING USING TEST(S) BUTTON

IF NO IN Q26f – (SMOKE) BUTTON TEST

- Press and hold the “Test” button.
 - Read directions on the alarm—some models’ “test” function requires push and release, others require push and hold.
- If alarm sounds, testing is complete.
 - However, label for collection due to inoperative sensor.
 - Collect identification data.
- If no alarm sound, proceed to instructions on replacing batteries/restoring power.

PROCEED TO INSTRUCTION SET D

C. INSTRUCTIONS ON TESTING CO ALARM

CO BUTTON TEST

- Press and hold the “Test/Reset” until the alarm sounds:
 - Place your fingers over the sounder opening and check the power and alarm by depressing the “Test/Reset” button.
- If alarm sounds, testing is complete. Collect identification data.
- If no alarm sounds, proceed to instructions on replacing batteries/restoring power.

26-1g1. (OBSERVE) Did alarm sound in response to the test button?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2
No test button on unit	3	3	3	3	3	3
Could not test	4	4	4	4	4	4

**IF COMBINATION ALARM, CONTINUE
ELSE, SKIP TO INSTRUCTION SET D**

26-1g2. (OBSERVE) Did alarm sound in response to the second test button?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2
No additional button on unit	3	3	3	3	3	3

D. INSTRUCTIONS ON HOW TO PROCEED (SMOKE ALARM)

- If smoke alarm sounded in response to Q. 26f, continue collecting identification data.
- If smoke alarm did not sound in response to Q. 26f, but did sound in response to Q. 26g, label for collection (due to inoperative sensor), and continue with collecting identification data.
- If smoke alarm did not sound in response to Q. 26f and Q. 26g, continue with Q. 26h.

E. INSTRUCTIONS ON HOW TO PROCEED (CO ALARM)

- If CO alarm sounded in response in response to Q. 26g, continue collecting identification data.
- If CO alarm did not sound in response to Q. 26g, continue with Q. 26h.

**IF ALARM FAILS TO SOUND, ATTEMPT TO REPLACE/INSTALL BATTERY
ELSE, SKIP TO INSTRUCTIONS ON HOW TO PROCEED**

26-1h. (READ) May I put a new battery in this alarm to determine whether the alarm needs to be replaced?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No (Label)	2	2	2	2	2	2

**IF BATTERY REPLACED/INSTALLED, CONTINUE WITH RESTESTING
ELSE, SKIP TO INSTRUCTIONS ON HOW TO PROCEED**

F. INSTRUCTIONS ON RETESTING SMOKE ALARM

After replacing battery/restoring battery, repeat SMOKE TEST using up to three 1-second sprays, 10 seconds apart with tube positioned against the grill.

26-1i. (OBSERVE) Did alarm sound in response to this smoke test?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No (label)	2	2	2	2	2	2

IF ALARM SOUNDS, SKIP TO INSTRUCTIONS ON HOW TO PROCEED ELSE, CONTINUE

G. INSTRUCTIONS ON RETESTING SMOKE ALARM TEST BUTTON

IF NO IN Q. 26i –BUTTON TEST

- Press and hold the “Test” button.
 - Read directions on the alarm – some models’ “test” function requires push and release, others require push and hold.
- If alarm sounds, testing is complete.
 - However, label for collection due to inoperative sensor.
 - Collect identification data.

IF ALARM SOUNDS, SKIP TO INSTRUCTIONS ON HOW TO PROCEED ELSE, SKIP TO Q26j

H. INSTRUCTIONS ON RETESTING CO ALARM TEST BUTTON

IF NO in Q. 26g – CO BUTTON TEST

- Press and hold the “Test/ Reset” until the alarm sounds:
 - Place your fingers over the sounder opening and check the power and alarm by depressing the “Test/Reset” button.
- If alarm sounded in response to test in, testing is complete. Collect identification data.
- If no alarm sounds, label for collection, and collect identification data.

26-1j1. (OBSERVE) Did alarm sound in response to this button test?

Alarm #	#1	#2	#3	#4	#5	#6
---------	----	----	----	----	----	----

Yes	1	1	1	1	1	1
No (Label)	2	2	2	2	2	2

IF SMOKE ALARM, SKIP TO INSTRUCTION SET I
ELSE IF, CO ALARMS, SKIP TO INSTRUCTION SET J
ELSE, COMBINATION ALARM, CONTINUE

26-1j2. (OBSERVE) Did alarm sound in response to the second test button?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No (Label)	2	2	2	2	2	2
No additional button on unit	3	3	3	3	3	3

I. INSTRUCTIONS ON HOW TO PROCEED (SMOKE ALARM)

- If smoke alarm sounded in response to Q. 26i, continue collecting identification data.
- If smoke alarm did not sound in response to Q. 26i, but did sound in response to Q. 26j, label for collection (due to fault inoperative sensor), and continue with collecting identification data.
- If smoke alarm did not sound in response to Q. 26e and Q. 26f, label for collection, and continue collecting identification data.

J. INSTRUCTIONS ON HOW TO PROCEED (CO ALARM)

- If CO alarm sounded in response to Q. 26j, continue collecting identification data.
- If CO alarm did not sound in response to Q. 26j, label for collection, and continue with collecting identification data.

26-1k. If could not test, why not?

Alarm #	#1	#2	#3	#4	#5	#6
Could not reach	1	1	1	1	1	1
Homeowner would not allow	2	2	2	2	2	2
No time	3	3	3	3	3	3
Other	4	4	4	4	4	4

IF Q26c = 1, 3, or 4 CONTINUE

ELSE IF Q26c = 2, GO TO Q26i

26-1l. (OBSERVE) What type of alarm is this?

Alarm #	#1	#2	#3	#4	#5	#6
Photoelectric	1	1	1	1	1	1
Ionization	2	2	2	2	2	2

Combined photo/ion	3	3	3	3	3	3
Combined ion with CO	4	4	4	4	4	4
Combined photo with CO	5	5	5	5	5	5
Don't know	6	6	6	6	6	6
Other _____	7	7	7	7	7	7

IF Q26l = 2 or 4 CONTINUE

ELSE IF Q26c = 1 or 3, GO TO Q26j

26-1m. (OBSERVE) What type of alarm is this?

Alarm #	#1	#2	#3	#4	#5	#6
Electrochemical	1	1	1	1	1	1
Metal Oxide	2	2	2	2	2	2
Biomimetic	3	3	3	3	3	3
Don't know	4	4	4	4	4	4
Other _____	5	5	5	5	5	5

26-1n. (OBSERVE) What type of power source does the alarm have?

Alarm #	#1	#2	#3	#4	#5	#6
Replaceable battery	1	1	1	1	1	1
Sealed battery	2	2	2	2	2	2
AC Only	3	3	3	3	3	3
AC with battery	4	4	4	4	4	4
Don't know	5	5	5	5	5	5

26-1o. (OBSERVE) What is the manufacture date of the alarm?

Alarm #	#1	#2	#3	#4	#5	#6
Year	_____	_____	_____	_____	_____	_____
Don't know	1	1	1	1	1	1

26-1p. (OBSERVE) What is the model number of the alarm?

Alarm #	#1	#2	#3	#4	#5	#6
Model number	_____	_____	_____	_____	_____	_____
Don't know	1	1	1	1	1	1

26-1q. (OBSERVE) Is the alarm (wired or wireless) interconnected with other alarms?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2
Don't know	3	3	3	3	3	3

26-1r. (OBSERVE) Is the alarm part of a private alarm system?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2

Don't know	3	3	3	3	3	3
------------	---	---	---	---	---	---

26-1s. (OBSERVE) Did the alarm have strobe lighting for hearing impaired?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2
Don't know	3	3	3	3	3	3

IF Q26c = 1, 3, or 4 CONTINUE
ELSE IF Q26c = 2, SKIP TO Q26u

26-1t. (OBSERVE) Is this alarm connected to a tactile notification device (bed shaker or pillow shaker) for the hearing impaired or blind?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2
Don't know	3	3	3	3	3	3

FOR BATTERY ONLY

26-1u. (OBSERVE) Was this alarm found to have a dead battery, that is, the old battery was connected but the alarm responded to aerosol smoke after battery replacement?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2

IF Q26u = 2, CONTINUE

ELSE, SKIP TO Q26w

FOR EITHER BATTERY OR AC ALARMS:

26-1v. (OBSERVE) Was the alarm found without a battery, with battery disconnected, or AC power disconnected?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2

26-1w. (READ): How old do you think this alarm is? Would you say . . .

Alarm #	#1	#2	#3	#4	#5	#6
Less than 1 year old	1	1	1	1	1	1
1–5 years old	2	2	2	2	2	2
6–10 years old	3	3	3	3	3	3
More than 10 years old	4	4	4	4	4	4
Don't know (DON'T READ)	5	5	5	5	5	5
Refused (DON'T READ)	6	6	6	6	6	6

IF ALARM DOES NOT WORK, CONTINUE

ELSE, SKIP TO POST INSPECTION

IF ALARM DOES NOT WORK

(READ) It is important that we determine why alarms don't work.

I would like to collect this alarm and send it to the U.S. Consumer Product Safety Commissions lab for analysis to find out why it does not work properly. We will provide you with a free replacement alarm.

26-1x. (READ) May I collect this alarm?

Alarm #	#1	#2	#3	#4	#5	#6
Yes	1	1	1	1	1	1
No	2	2	2	2	2	2

IF Q26x = 2, CONTINUE

ELSE, SKIP TO PACKAGING INSTRUCTIONS

IF NO

(READ) That is fine. You may keep the alarm. However, I will still provide you with a new alarm, and give you this box so you may send your old alarm to the U.S. Consumer Product Safety Commission's lab for analysis, if you may choose to do so.

IF Q26x = 1, CONTINUE

ELSE, SKIP TO SKIP TO Q26y

CAREFULLY PACKAGE ALARM

(AFTER ALARM HAS BEEN REMOVED/BOX GIVEN) Here is a replacement (smoke/CO) alarm. I'm going to test it now to be sure it works.

PERFORM BUTTON TEST:

- If alarm sounded, give respondent replacement alarm.
- If alarm does not sound, select & test another alarm.

26-1y. (OBSERVE) Post inspection actions taken: (SELECT ALL THAT APPLY)

Alarm #	#1	#2	#3	#4	#5	#6
No action required	1	1	1	1	1	1
Battery replaced	2	2	2	2	2	2
Installed missing battery	3	3	3	3	3	3
Refused battery installation/ replacement	4	4	4	4	4	4
Collected alarm	5	5	5	5	5	5
Advised replacement (AC/ hard wired)	6	6	6	6	6	6
Could not replace alarm/ Refused	7	7	7	7	7	7

26-1z. (READ) Are there any other alarms on this floor? This could include smoke alarms or carbon monoxide alarms.

- ☐ Yes (GO BACK to Q26-b)
- ☐ No
- ☐ Don't know (ASK TO INSPECT. IF YES, INSPECT FLOOR, IF "NO", TREAT AS NO AND CONTINUE)

**IF Q25 = 1, SKIP TO NEXT SECTION
ELSE, CONTINUE**

26-1aa. (READ) What about other floors? Are there any smoke or carbon monoxide alarms on any other floors in this (apartment/house)?

- ☐ Yes (GO BACK to Q26-a)
- ☐ No
- ☐ Don't know (ASK TO INSPECT ADDITIONAL FLOORS. IF YES, GO TO THE OTHER FLOOR, IF NO, TREAT AS "NO", AND CONTINUE)

ALARMS AND DETECTORS

**IF Q4a = 1, CONTINUE
ELSE, SKIP TO Q28**

27. Did the occupant know the location of the smoke alarms?

- ☐ Knew all
- ☐ Knew at least one but not all
- ☐ Knew none

**IF Q5a = 1, CONTINUE
ELSE, SKIP TO NEXT SECTION**

28. Did the occupant know the location of the CO alarms?

- ☐ Knew all
- ☐ Knew at least one but not all
- ☐ Knew none

NO SMOKE ALARMS PRESENT

**IF Q4a = 2 CONTINUE
ELSE, SKIP TO NEXT SECTION**

If no smoke alarms are present, ask:

29. On a scale of 1 to 5, where 1 is "Not at All Necessary," and 5 is "Extremely Necessary," how necessary do you feel it is to have smoke alarms installed in your home?

1 2 3 4 5 DK RF

30. Can you tell me some of the reasons why you don't have smoke alarms installed in your home? (DO NOT READ LIST, SELECT ALL THAT APPLY)

- ☐ Don't think I need one
- ☐ Did not come with residence
- ☐ They are a nuisance
- ☐ They did not or don't work
- ☐ Never got around to replacing previous alarms
- ☐ It is the landlord's responsibility
- ☐ Other reason _____
- ☐ Don't know
- ☐ Refused

NO CO ALARMS PRESENT

IF Q5a = 2 CONTINUE
ELSE, SKIP TO Q32a

If no CO alarms present, ask:

31. On a scale of 1 to 5, where 1 is "Not at All Necessary," and 5 is "Extremely Necessary," how necessary do you feel it is to have carbon monoxide alarms installed in your home?

1 2 3 4 5 DK RF

32. Can you tell me some of the reasons why you don't have carbon monoxide alarms installed in your home?
(Open ended, Probe: Anything else?)

IF Q4a = 2 or 3 or Q5a = 2 or 3 SKIP TO Q34a
ELSE, CONTINUE

Post-inspection Follow-up Questions with Respondent

Now I would like to ask a few additional questions about your alarms.

33a. After we contacted you to arrange this visit, did you buy any additional smoke or carbon monoxide alarms, or replace any batteries in your alarms? (SELECT ALL THAT APPLY)

- ☐ Yes
- ☐ No (SKIP TO Q33)
- ☐ Don't Know (SKIP TO Q33)
- ☐ Refused (SKIP TO Q33)

If Yes:

33b. How many smoke alarms? _____

33c. How many carbon monoxide alarms? _____

33d. How many batteries? _____

34a. In the past 12 months, have you sought out any information about fire and carbon monoxide safety?

- ☐ Yes
☐ No
☐ Don't know
☐ Refused

IF Q34a = 1, CONTINUE
ELSE, SKIP TO Q35

34b. Where do you obtain information about fire and carbon monoxide safety? (READ LIST, SELECT ALL THAT APPLY)

Interviewer: First collect information related to fire safety, then carbon monoxide safety.

Sources of information	Fire safety	Carbon monoxide safety
News and media, like TV news, newspaper, or radio	☐	☐
Online websites	☐	☐
Family or close friends	☐	☐
Community or religious organizations	☐	☐
Social media like Facebook, Twitter, or Blogs	☐	☐
Local fire department	☐	☐
None of these (DON'T READ)	☐	☐
Don't know (DON'T READ)	☐	☐
Refused (DON'T READ)	☐	☐

35. How often do you or another member of the household cook at home? Does a member of this household cook . . . (READ LIST)

- ☐ Never
☐ Less than once a month

- ☐ A few times per month
- ☐ A few times per week
- ☐ Every day
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

DEMOGRAPHICS

Great! To ensure that we interview a broad mix of residents, I have a few brief demographic questions to ask about you and others within your household. This should only take a few minutes of your time.

36. Including yourself, how many people live or stay in your household? This can include:

- Anyone who is living or staying there for more than 2 months
- Yourself, if you have lived there for more than 2 months
- Anyone else staying there who does not have another place to stay, even if they are here for 2 months or less

Please do not include anyone who is living somewhere else for more than 2 months, such as a college student living away, or someone in the Armed Forces on deployment.

Enter number **of people**

37. Thinking of the individual(s) who live here, is there anyone . . .

	Yes	No	Don't know	Refused	If yes, how many?
Under 5 years old?	☐	☐	☐	☐	
5–17 years old?	☐	☐	☐	☐	
18–64 years old?	☐	☐	☐	☐	
65 years old, or older?	☐	☐	☐	☐	

38. What is the highest level of education you have completed?

- ☐ Less than high school
- ☐ High school graduate or high school equivalent (GED)
- ☐ Trade school
- ☐ Some college, no degree
- ☐ College graduate
- ☐ Post graduate degree
- ☐ Don't know
- ☐ Refused

39. What is your race?

(SELECT ALL THAT APPLY)

- ☐ White
- ☐ Black or African American
- ☐ Asian
- ☐ Native American, American Indian or Alaska Native
- ☐ Native Hawaiian or other pacific islander
- ☐ Other (Specify) _____
- ☐ Don't know
- ☐ Refused

40. Is anyone in the household of Hispanic or Latino origin or descent?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

41. Is anyone in the household hearing impaired?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

42. Does anyone in the household have a physical, mental, or other health condition that has lasted 6 months or more and makes it difficult to carry out day-to-day activities?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

43. Do any people in the home smoke cigarettes, cigars, or pipes? Please do not include e-cigarettes.

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

44. What is the approximate combined annual income of all occupants in the home? (If necessary read)

- ☐ Less than \$25,000
- ☐ \$25,000-\$49,999
- ☐ \$50,000-\$99,999
- ☐ \$100,000-\$149,999
- ☐ \$150,000 or more
- ☐ Don't know (DON'T READ)
- ☐ Refused (DON'T READ)

Thank you so much for participating in this survey. You can call us if you have any questions about fire or CO safety.

Time visit ended:_____