

Appendix B: Survey Questions

**PEW RESEARCH CENTER
GENERAL PUBLIC SCIENCE SURVEY
TOPLINE
AUG. 15-25, 2014
N=2,002**

NOTE: ALL NUMBERS ARE PERCENTAGES. ANY PERCENTAGES GREATER THAN ZERO BUT LESS THAN 0.5% ARE REPLACED BY AN ASTERISK (*). COLUMNS/ROWS MAY NOT TOTAL 100% DUE TO ROUNDING.

Q1 THROUGH Q6. PREVIOUSLY RELEASED

ASK ALL:

Q.7 In your opinion, generally do you think... **[READ AND RANDOMIZE]**

Aug 15-25, <u>2014</u>		Apr 28-May 12, <u>2009</u>
59	Science and religion are often in conflict [OR]	55
38	Science and religion are mostly compatible	38
4	Don't know/Refused (VOL.)	7

TREND FOR COMPARISON:

AAAS members survey

Sept 11-Oct 13,

2014

50	Science and religion are often in conflict [OR]
50	Science and religion are mostly compatible
*	No answer

ASK ALL:

Q.8 Now thinking about your own religious beliefs, does science sometimes conflict with your own religious beliefs, or doesn't it?

Aug 15-25, <u>2014</u>		Apr 28-May 12, <u>2009</u>
30	Yes, science conflicts with own religious beliefs	36
68	No, science does not conflict with own religious beliefs	61
3	Don't know/Refused (VOL.)	3

IF Q8=1 AND FORM 1, ASK:

Q9F1 Can you tell me some ways in which science conflicts with your own religious beliefs? [**OPEN END; ACCEPT UP TO THREE RESPONSES; PROBE ONCE IF "DON'T KNOW," AND PROBE FOR CLARITY, BUT DO NOT PROBE FOR ADDITIONAL RESPONSES**]

BASED ON THOSE SAYING SCIENCE CONFLICTS WITH RELIGIOUS BELIEF AND FORM 1 [N=328]

Aug 15-25

2014

36	Conflict over evolution, creation of universe, Darwin, Big Bang
24	NET general conflict, belief in God, Bible, facts vs. beliefs, God is in charge vs. man is in charge
6	<i>Conflict over belief or denial of belief in God, higher being</i>
10	<i>Conflict over Bible, miracles, immaculate conception</i>
6	<i>General—conflict between science and religion</i>
3	<i>General—science is based on facts, religion based on beliefs</i>
11	NET Conflict over beginning of life
7	<i>Abortion, beginning of life</i>
1	<i>Birth control, artificial insemination</i>
3	<i>Stem cell research</i>
7	NET Conflict over specific medical, scientific practices
4	<i>Medical treatments, blood transfusion, natural healing, vaccines</i>
1	<i>Cloning, animals and cloning</i>
2	<i>Genetics, genetic engineering</i>
1	Conflict over beliefs about the afterlife, euthanasia and right to die
2	Conflict over global warming, climate change
*	Space travel, exploration of the universe
1	Gays, homosexuality
2	Specific mentions: school teaching, news media, political leaders
8	Other, unclear response
18	Don't know

Q9F1 CONTINUED.**OPEN-END TREND FOR COMPARISON¹²:****Based on those saying science conflicts with their religious beliefs and form 1 [N=342]***Apr 28-May 12,*2009

41	Conflict over evolution, creation of universe, Darwin, big bang
11	NET general conflict, belief in God, Bible, facts vs. beliefs, God is in charge vs. man is in charge
4	<i>Conflict over belief or denial of belief in God, higher being</i>
4	<i>Conflict over Bible, miracles, immaculate conception</i>
2	<i>General—conflict between science and religion</i>
1	<i>General—science is based on facts, religion based on beliefs</i>
23	NET Conflict over beginning of life
12	<i>Abortion, beginning of life</i>
2	<i>Birth control, artificial insemination</i>
8	<i>Stem cell research</i>
8	NET Conflict over specific medical, scientific practices
3	<i>Medical treatments, blood transfusion, natural healing, vaccines</i>
5	<i>Cloning, animals and cloning</i>
*	<i>Genetics, genetic engineering</i>
*	Conflict over beliefs about the afterlife, euthanasia and right to die
*	Gays, homosexuality
4	Other, unclear response
25	Don't know

NO QUESTION 10-11**QUESTION 12 THROUGH 13 PREVIOUSLY RELEASED****NO QUESTION 14-15**

¹² Comparisons of trends over time for open-ended questions should be made with caution. Frequencies shown here differ somewhat from the [2009 Pew Research topline](#) and report because the 2009 responses were re-coded to allow for greater comparability with coded responses to the 2014 survey.

ASK ALL:

Now a few questions about some issues...

[RANDOMIZE QUESTIONS 16-18 IN BLOCKS WITH QUESTIONS Q20F1 to Q23 IN BLOCKS]**ASK ALL:**

Q.16 Which comes closer to your view? **[READ AND RANDOMIZE]:** Humans and other living things have evolved over time **[OR]** Humans and other living things have existed in their present form since the beginning of time.

IF EVOLVED (Q.16=1), ASK:

Q.17 And do you think that...**[READ OPTIONS AND RANDOMIZE]:** Humans and other living things have evolved due to natural processes such as natural selection **[OR]** A supreme being guided the evolution of living things for the purpose of creating humans and other life in the form it exists today?

	<u>Total</u>	-----Evolved over time-----			Existed in present form since beginning	(VOL.) DK/ Ref
		<i>Due to natural processes</i>	<i>Supreme being guided evolution</i>	(VOL.) DK/ Ref		
Aug 15-25, 2014	65	35	24	5	31	4
Feb 27-Mar 16, 2014	61	34	23	4	34	5
Mar 21-Apr 8, 2013	60	32	24	4	33	7
Apr 28-May 12, 2009 ¹³	61	32	22	7	31	8

TRENDS FOR COMPARISON:

AAAS members survey

Sept 11-Oct 13, 2014 ¹⁴	98	90	8	1	2	*
May 1-June 14, 2009	97	87	8	2	2	1

[RANDOMIZE QUESTIONS 16-18 IN BLOCKS WITH QUESTIONS Q20F1 to Q23 IN BLOCKS]**ASK ALL:**

Q.18 From what you've heard or read, do scientists generally agree that humans evolved over time, or do they not generally agree about this?

		TRENDS FOR COMPARISON:		
		Apr 28-May 12, 2009	July 2006 ¹⁵	July 2005
Aug 15-25, 2014	66	60	62	54
	Yes, scientists generally agree that humans evolved over time			
	29	28	28	33
	No, scientists do not generally agree that humans evolved over time			
	6	11	10	13
	Don't know/Refused (VOL.)			

No QUESTION 19

¹³ Similar questions on beliefs about evolution were asked in Pew Research surveys in July 2006 and July 2005. Beliefs about evolution were preceded by a question about whether respondents believed in God. That survey context may influence responses to questions about evolution. For details see topline in "[Many Americans Uneasy with Mix of Religion and Politics](#)", August 24, 2006.

¹⁴ The nested Q17 responses do not add to the net of 98% on Q16 due to rounding.

¹⁵ Question wording for July 2006 and earlier asked "From what you've heard or read, is there general agreement among scientists that humans evolved over time, or not?"

**[RANDOMIZE QUESTIONS 16-18 IN BLOCKS WITH QUESTIONS Q20F1 to Q23 IN BLOCKS]
ASK FORM 1 ONLY: [N=1,001]**

Q.20F1 Which of these three statements about the Earth's temperature comes closest to your view?

[READ AND RANDOMIZE FIRST TWO OPTIONS; KEEP THIRD OPTION LAST]:

Aug 15-25, <u>2014</u>		Apr 28-May 12, <u>2009</u> ¹⁶
50	The Earth is getting warmer mostly because of human activity such as burning fossil fuels [OR]	49
23	The Earth is getting warmer mostly because of natural patterns in the Earth's environment	36
25	There is no solid evidence that the Earth is getting warmer	11
2	Don't know/Refused (VOL.)	4

TRENDS FOR COMPARISON:

	Mostly b/c of human activity such as burning fossil fuels	Mostly b/c of natural patterns in Earth's environment	No solid evidence Earth getting warmer	No answer
AAAS members <i>survey</i> ¹⁷				
Sept 11-Oct 13, 2014	87	9	3	1
May 1-June 14, 2009	84	10	4	2

¹⁶ Response options for the 2009 survey were, "The Earth is getting warmer mostly because of natural changes in the atmosphere; the Earth is getting warmer mostly because of human activity such as burning fossil fuels; the Earth is not getting warmer."

¹⁷ Question wording for 2009 and 2014 scientists survey: "From what you've read and heard, do you think ... [RANDOMIZE RESPONSE OPTIONS 1 & 2]." One of the response options in 2009 was worded differently. It read "the Earth is getting warmer mostly because of natural changes in the atmosphere."

**[RANDOMIZE QUESTIONS 16-18 IN BLOCKS WITH QUESTIONS Q20F1 to Q23 IN BLOCKS]
ASK FORM 2 ONLY: [N=1,001]**

Q.21AF2 From what you've read and heard, is there solid evidence that the average temperature on Earth has been getting warmer over the past few decades, or not?

ASK IF EARTH IS GETTING WARMER (Q.21AF2=1):

Q.21BF2 Do you believe that the Earth is getting warmer [**READ AND RANDOMIZE:** mostly because of human activity such as burning fossil fuels/mostly because of natural patterns in the Earth's environment]?

	Total	-----Yes, solid evidence-----				(VOL.)	
		<i>Mostly b/c of human activity such as burning fossil fuels</i>	<i>Mostly b/c of natural patterns in Earth's environment</i>	<i>DK/Ref</i>	<i>No</i>	<i>Mixed/some evidence</i>	<i>DK/Ref</i>
Aug 15-25, 2014 ¹⁸	72	46	22	3	25	1	2
Feb 27-Mar 16, 2014	61	40	18	3	35	1	3
Oct 9-13, 2013	67	44	18	4	26	2	5
Mar 13-17, 2013	69	42	23	4	27	1	4
Oct 4-7, 2012	67	42	19	6	26	1	6
Nov 9-14, 2011	63	38	18	6	28	1	8
Feb 22-Mar 1, 2011	58	36	18	5	34	2	5
Oct 13-18, 2010	59	34	18	6	32	1	8
Sep 30-Oct 4, 2009	57	36	16	6	33	2	8
April, 2008	71	47	18	6	21	3	5
January, 2007	77	47	20	10	16	1	6
August, 2006	77	47	20	10	17	1	5
July, 2006	79	50	23	6	17	1	3
June, 2006	70	41	21	8	20	1	9

**[RANDOMIZE QUESTIONS 16-18 IN BLOCKS WITH QUESTIONS Q20F1 to Q23 IN BLOCKS]
ASK FORM 2 ONLY: [N=1,001]**

Q.21AF2 From what you've read and heard, is there solid evidence that the average temperature on Earth has been getting warmer over the past few decades, or not?

ASK IF EARTH IS NOT GETTING WARMER (Q.21AF2=2):

Q.21CF2 Do you think that we just don't know enough yet about whether the Earth is getting warmer or do you think it's just not happening?

Aug 15-25, 2014		Feb 27-Mar 16 2014	Oct 9-13 2013 ¹⁹
25	NET No solid evidence (Q.21AF2)	35	26
11	<i>Just don't know enough yet</i>	17	12
13	<i>Just not happening</i>	17	13
1	<i>Don't know/Refused (VOL.)</i>	1	1
75	Solid evidence/Some evidence (VOL.) /Don't know (VOL.)(Q.21AF2)	65	74

¹⁸ These questions have since been asked in a May 7-June 7, 2015 survey with 5,122 respondents; the results are similar. See Pew Research Center's June report "[Catholics Divided Over Global Warming: Partisan Differences Mirror Those Among General Public.](#)"

¹⁹ Prior to October 2013, follow-up question was not asked of those who said there was no solid evidence.

NO QUESTION 22**[RANDOMIZE QUESTIONS 16-18 IN BLOCKS WITH QUESTIONS Q20F1 to Q23 IN BLOCKS]****ASK ALL:**

Q.23 From what you've heard or read, do scientists generally agree that the Earth is getting warmer because of human activity, or do they not generally agree about this?

Aug 15-25, 2014		Oct 9-13 2013	Oct 4-7 2012	Oct- 13-18 2010	Apr 28- May 12 2009
57	Yes, scientists generally agree that the Earth is getting warmer because of human activity	54	45	44	56
37	No, scientists do not generally agree that the Earth is getting warmer because of human activity	37	43	44	35
6	Don't know/Refused (VOL.)	10	12	12	9

ASK ALL:

On another topic.

Q.24 All in all, do you favor or oppose **[INSERT ITEM; RANDOMIZE]?** Do you favor or oppose **[NEXT ITEM]?**

		<u>Favor</u>	<u>Oppose</u>	<u>(VOL.) DK/Ref</u>
a.	The use of animals in scientific research			
	Aug 15-25, 2014	47	50	3
	Apr 28-May 12, 2009	52	43	6
	TRENDS FOR COMPARISON:			
	AAAS members <i>survey</i>			
	Sept 11-Oct 13, 2014	89	9	2
	May 1-June 14, 2009	93	5	2
b.	Building more nuclear power plants to generate electricity ²⁰			
	Aug 15-25, 2014	45	51	4
	Apr 28-May 12, 2009	51	42	7
	TRENDS FOR COMPARISON:			
	AAAS members <i>survey</i>			
	Sept 11-Oct 13, 2014	65	33	2
	May 1-June 14, 2009	70	27	3
c.	The increased use of fracking, a drilling method that uses high-pressure water and chemicals to extract oil and natural gas from underground rock formations ²¹			
	Aug 15-25, 2014	39	51	10
	Sep 4-8, 2013	44	49	7
	Mar 13-17, 2013	48	38	14
	TREND FOR COMPARISON:			
	AAAS members <i>survey</i>			
	Sept 11-Oct 13, 2014	31	66	3

²⁰ Other Pew Research surveys have asked for views about "government policies to address America's energy supply" including opinions about "the government promoting the use of nuclear power." See "[Continued Support for Keystone XL Pipeline](#)," Sep. 26, 2013.

²¹ A Pew Research survey conducted Nov. 6-9, 2014 repeated this question in a three-question set. See "[Little Enthusiasm, Familiar Divisions After the GOP's Midterm Victory](#)," Q.69 on the topline.

Q24 CONTINUED

		<u>Favor</u>	<u>Oppose</u>	<u>(VOL.)</u> <u>DK/Ref</u>
d.	The increased use of genetically engineered plants to create a liquid fuel replacement for gasoline Aug 15-25, 2014	68	26	6
	TREND FOR COMPARISON: AAAS members <i>survey</i> Sept 11-Oct 13, 2014	78	21	2
e.	Allowing more offshore oil and gas drilling in U.S. waters ²² Aug 15-25, 2014	52	44	4
	TREND FOR COMPARISON: AAAS members <i>survey</i> Sept 11-Oct 13, 2014	32	66	2
f.	Allowing more people access to experimental drugs before clinical trials have shown the drugs to be safe and effective for that disease or condition Aug 15-25, 2014	54	43	3

ASK ALL:

Q.25 Thinking about childhood diseases, such as measles, mumps, rubella and polio... **[READ AND RANDOMIZE RESPONSE OPTIONS]**

Aug 15-25, <u>2014</u>		Apr 28-May 12, <u>2009</u> ²³
68	Should all children be required to be vaccinated [OR]	69
30	Should parents be able to decide NOT to vaccinate their children	28
1	Don't know/Refused (VOL.)	3

TRENDS FOR COMPARISON:

	All children should be required to be <u>vaccinated</u>	Parents should be able to decide NOT to vaccinate <u>their children</u>	<u>No answer</u>
AAAS members <i>survey</i> ²⁴ Sept 11-Oct 13, 2014	86	13	1
May 1-June 14, 2009	82	17	1

NO QUESTION 26

²² Other Pew Research surveys have asked for views about "government policies to address America's energy supply" including opinions about "the government allowing more offshore oil and gas drilling in U.S. waters." See "[Continued Support for Keystone XL Pipeline](#)," Sep. 26, 2013.

²³ Answer choices for 2009 surveys were, "The Earth is getting warmer mostly because of natural changes in the atmosphere; The Earth is getting warmer mostly because of human activity such as burning fossil fuels; The Earth is not getting warmer."

²⁴ AAAS members question wording was "Thinking about childhood diseases, such as measles, mumps, rubella and polio, do you think...[RANDOMIZE RESPONSE OPTIONS 1 & 2: Parents should be able to decide NOT to vaccinate their children/All children should be required to be vaccinated]"

ASK ALL:

Q.27 Thinking about the use of biological engineering to create artificial organs for humans needing a transplant operation, would you say this is making appropriate use of medical advances OR is it taking medical advances too far?

Aug 15-25,
2014

74 Appropriate use of medical advances
23 Taking medical advances too far
3 Don't know/Refused **(VOL.)**

ASK ALL:

Q.28 Which of these statements comes closest to your point of view, even if neither is exactly right?
[READ IN ORDER]

Aug 15-25,
2014

Mar 21-Apr 8, Apr 6-May 6,
2013 1999²⁵

38	(One) The growing world population will NOT be a major problem because we will find a way to stretch our natural resources [OR]	37	42
59	(Two) The growing population WILL be a major problem because there won't be enough food and resources to go around	61	56
--	Neither/Both equally (VOL.)	1	1
3	Don't know/Refused (VOL.)	2	1

TREND FOR COMPARISON:

	The growing world population will NOT be a major problem...	The growing world population WILL be a major problem...	No answer
AAAS members <i>survey</i> Sept 11-Oct 13, 2014	17	82	*

ASK ALL:

On another topic.

Q.29 Do you think the SPACE STATION has been a good investment for this country, or don't you think so?²⁶

Aug 15-25,
2014

64 Good investment
29 Not a good investment
7 Don't know/Refused **(VOL.)**

TREND FOR COMPARISON:

	Good investment	Not a good investment	No answer
AAAS members <i>survey</i> Sept 11-Oct 13, 2014	68	31	2

²⁵ In 1999 survey, response options one and two were randomized.

²⁶ For other Pew Research surveys with questions related to the U.S. space program see "[Majority Sees U.S. Leadership in Space as Essential](#)," July 5, 2011.

ASK ALL:

Q.30 The cost of sending human astronauts to space is considerably greater than the cost of using robotic machines for space exploration. As you think about the future of the U.S. space program, do you think it is essential or not essential to include the use of human astronauts in space?

Aug 15-25,
2014

59 Essential
39 Not essential
3 Don't know/Refused **(VOL.)**

TREND FOR COMPARISON:

AAAS members <i>survey</i> Sept 11-Oct 13, 2014	<u>Essential</u>	<u>Not essential</u>	<u>No answer</u>
	47	52	1

NO QUESTION 31**ASK ALL:**

Q.32 From what you've heard or read, would you say that **[READ AND RANDOMIZE 1-2]**

Aug 15-25,
2014

42 Scientists generally believe that the universe was created in a single, violent event, often called "the Big Bang"
52 Scientists are divided in their views about how the universe was created
2 Both/Neither **(VOL.)**
5 Don't know/Refused **(VOL.)**

[RANDOMIZE ORDER OF Q33 AND Q34]**ASK ALL:**

Q.33 Would you say that changing a baby's genetic characteristics to make the baby more intelligent is making appropriate use of medical advances OR is it taking medical advances too far?²⁷

Aug 15-25,
2014

15 Appropriate use of medical advances
83 Taking medical advances too far
2 Don't know/Refused **(VOL.)**

²⁷ A similar question was asked on the Virginia Commonwealth University Life Sciences Survey September 3-26, 2003. Question wording was, "Would you say that changing a baby's genetic characteristics for cosmetic purposes such as eye or hair color is making appropriate use of medical advances or is it taking medical advances too far?" Fully 94% of adults said this was taking medical advances too far, 4% said it was an appropriate use of medical advances, 2% volunteered don't know or gave no response. For details see "[Public Values Science But Concerned About Biotechnology](#)"

[RANDOMIZE ORDER OF Q33 AND Q34]**ASK ALL:**

Q.34 Would you say that changing a baby's genetic characteristics to reduce the risk of serious diseases is making appropriate use of medical advances OR is it taking medical advances too far?

		<i>VCU Life Sciences Survey</i>	
Aug 15-25, <u>2014</u>		Sept 3-26, <u>2003</u>	
46	Appropriate use of medical advances	41	
50	Taking medical advances too far	54	
4	Don't know/Refused (VOL.)	6	

ASK ALL:

On a different topic.

Q.35 Do you think it is generally safe or unsafe to eat foods grown with pesticides?

Aug 15-25, <u>2014</u>	
28	Generally safe
69	Generally unsafe
3	Don't know/Refused (VOL.)

TREND FOR COMPARISON:

<i>AAAS members survey</i> Sept 11-Oct 13, 2014	<u>Generally safe</u>	<u>Generally unsafe</u>	<u>No answer</u>
	68	31	1

NO QUESTION 36

ASK ALL: Scientists can change the genes in some food crops and farm animals to make them grow faster or bigger and be more resistant to bugs, weeds and disease.²⁸

ASK ALL:

Q.37 When you are food shopping, how often, if ever, do you LOOK TO SEE if the products are genetically modified? **[READ]**

Aug 15-25, <u>2014</u>	
25	Always
25	Sometimes
17	Not too often
31	Never
1	Someone else in HH does the food shopping (VOL.)
1	Don't know/Refused (VOL.)

ASK ALL:

Q.38 Do you think it is generally safe or unsafe to eat genetically modified foods?

Aug 15-25, <u>2014</u>	
37	Generally safe
57	Generally UNsafe
6	Don't know/Refused (VOL.)

²⁸ Introduction to question set from ABC News, July 2003

Q.38 CONTINUED**TREND FOR COMPARISON:**

AAAS members <i>survey</i> Sept 11-Oct 13, 2014	<u>Generally safe</u> 88	<u>Generally unsafe</u> 11	<u>No answer</u> 1
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TRENDS FOR COMPARISON:

ABC News: Scientists can change the genes in some food crops and farm animals to make them grow faster or bigger and be more resistant to bugs, weeds and disease. Do you think this genetically modified food, also known as bio-engineered food, is or is not safe to eat?

	<i>ABC News</i> <i>July 2003</i>	<i>ABC News</i> <i>July 2001</i>
Safe	46	35
Unsafe	46	52
No opinion (VOL.)	9	13

ASK ALL:

Q.39 From what you've heard or read, would you say scientists have a clear understanding of the health effects of genetically modified crops OR are scientists NOT clear about this?

Aug 15-25,
2014

28	Scientists have a clear understanding
67	Scientists do NOT have a clear understanding
4	Don't know/Refused (VOL.)

ASK ALL:

Q.40 Which of these statements best describes your views, even if neither is exactly right?
[READ; RANDOMIZE RESPONSE OPTIONS]

Aug 15-25,
2014

50	Churches and other houses of worship should express their views about policy decisions on scientific issues [OR]
46	Churches and other houses of worship should keep out of policy decisions on scientific issues
2	Neither/Both (VOL.)
2	Don't know/Refused (VOL.)

Q41 HELD FOR FUTURE RELEASE**QUESTIONS KNOSCT14 THROUGH THE END PREVIOUSLY RELEASED**