## Appendix B: Topline

## PEW RESEARCH CENTER GENERAL PUBLIC SCIENCE SURVEY TOPLINE <br> AUG. 15-25, 2014 <br> $\mathbf{N}=\mathbf{2 , 0 0 2}$

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.

## ASK ALL:

Q. $1 \quad$ All in all, are you satisfied or dissatisfied with the way things are going in this country today?

Aug 15-25,
$\underline{2014^{56}}$
26 Satisfied
70 Dissatisfied
4 Don't know/Refused (VOL.)

## ASK ALL:

Q. 2 We'd like you to compare the United States to other industrialized countries in a few different areas. (First,) what about... [INSERT ITEM; READ AND RANDOMIZE]? [READ FOR FIRST ITEM, THEN AS NECESSARY: Do you think the U.S. is the BEST IN THE WORLD, above average, average or below average in [ITEM] compared to other industrialized countries?]

| Best in <br> the world | Above <br> average |
| :---: | :---: |
| Average |  | | Below (VOL.) |
| :---: |
| average |$\underline{\text { DK/Ref }}$

a. Its scientific achievements Aug 15-25, 2014 Apr 28-May 12, 2009

15
17

39
$-9$3
$26 \quad 5 \quad 4$

## TREND FOR COMPARISON:

AAAS scientists survey:

| Sept 11 -Oct 13, 2014 57 | 45 | 47 | 6 | 1 | $*$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| May 1-June 14, 2009 | 49 | 45 | 5 | 1 | $*$ |

b. Its military

| Aug 15-25, 2014 | 39 | 37 | 15 | 5 | 3 |
| :--- | :---: | :---: | :--- | :--- | :--- |
| Apr 28-May 12, 2009 | 42 | 39 | 13 | 3 | 3 |
|  |  |  |  |  |  |
| nomy | 7 | 26 | 36 | 29 | 2 |
| Aug 15-25, 2014 | 22 | 33 | 31 | 3 |  |
| Apr 28-May 12, 2009 | 12 | 22 |  |  |  |

[^0]
## Q. 2 CONTINUED...

Best in

the world \begin{tabular}{c}
Above <br>
average

$\underline{\text { Average }}$

Below (VOL.) <br>
average
\end{tabular}

## NO ITEM D

e. Science, technology, engineering and math education for grades K to 12

| Aug | $15-25,2014$ | 7 | 22 | 39 | 29 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

TREND FOR COMPARISON:
AAAS scientists survey:
Sept 11-Oct 13, $2014^{58} 11038 \quad 46$ *
f. Its political system

| Aug 15-25, 2014 | 12 | 22 | 32 | 31 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Apr 28-May 12, 2009 | 19 | 31 | 29 | 16 | 5 |

FORM 1 ONLY: [ $N=1,001$ ]
gF1. Medical treatment

| Aug 15-25, 2014 | 17 | 34 | 29 | 20 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |

TREND FOR COMPARISON:
AAAS scientists survey:
Sept 11-Oct 13, 2014 ${ }^{59} \quad 25 \quad 39 \quad 22 \quad 13$ *

FORM 2 ONLY: [ $N=1,001$ ]
hF2. Its health care

| Aug 15-25, 2014 | 9 | 16 | 32 | 39 | 3 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Apr 28-May 12, 2009 | 15 | 23 | 32 | 27 | 2 |

## ASK ALL:

Now I'd like to ask you some questions about science.
Q. 3 How much do you ENJOY keeping up with news about science - a lot, some, not much, or not at all?

| Aug 15-25, |  | Apr 28-May 12, |
| :---: | :--- | :---: |
| $\frac{2014}{37}$ | A lot | $\frac{2009}{35}$ |
| 35 | Some | 41 |
| 18 | Not much | 16 |
| 9 | Not at all | 8 |
| 1 | Don't know/Refused (VOL.) | 1 |

[^1]
## ASK ALL:

Q. 4 Overall, has science made life easier or more difficult for most people?

| Aug 15-25, |  | Apr 28-May 12, |
| :---: | :--- | :---: |
| $\frac{2014}{79}$ | Easier | $\frac{2009}{83}$ |
| 15 | More difficult | 10 |
| 1 | Not had much of an effect (VOL.) | 1 |
| 4 | Don't know/Refused (VOL.) | 6 |

## ASK ALL:

Q. 5 Has science had a mostly positive or mostly negative effect on the quality of [INSERT ITEM;

RANDOMIZE] in the U.S.? What about [NEXT ITEM]? [IF NECESSARY: Has science had a mostly positive or mostly negative effect on the quality of [ITEM] in the U.S.?]

|  |  | Mostly positive | Mostly negative | (VOL.) <br> Not had much of an effect | (VOL.) DK/Ref |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. | Food |  |  |  |  |
|  | Aug 15-25, 2014 | 62 | 34 | 1 | 3 |
|  | Apr 28-May 12, $2009{ }^{60}$ | 66 | 24 | 2 | 8 |
| b. Health care |  |  |  |  |  |
|  | Aug 15-25, 2014 | 79 | 18 | 1 | 3 |
|  | Apr 28-May 12, 2009 | 85 | 10 | 1 | 4 |
| c. | The environment |  |  |  |  |
|  | Aug 15-25, 2014 | 62 | 31 | 2 | 5 |
|  | Apr 28-May 12, 2009 | 66 | 23 | 2 | 8 |

## ASK ALL

Q. 6 Which of these statements best describes your views, even if neither is exactly right?
[READ; DO NOT RANDOMIZE RESPONSE OPTIONS]
Aug 15-25,
$\underline{2014}$
60 (One) Public opinion should play an important role to guide policy decisions about scientific issues,
OR
35 (Two) Public opinion should NOT play an important role to guide policy decisions about scientific issues because these issues are too complex for the average person to understand
Neither/Both (VOL.)
Don't know/Refused (VOL.)

## QUESTIONS 7 THROUGH 9 HELD FOR FUTURE RELEASE NO QUESTION 10-11

[^2]
## ASK ALL:

Q. 12 In your opinion, do government investments in [INSERT ITEM; RANDOMIZE] usually pay off in the long run, or are they not worth it?
a. Basic scientific research

> Aug 15-25, 2014
> Apr 28-May 12, 2009

| Yes, pay off <br> in the long run | No, aren't <br> worth it | (VOL.) <br> DK/Ref |
| :---: | :---: | :---: |
| 71 | 24 | 5 |
| 73 | 18 | 9 |

b. Engineering and technology

| Aug 15-25, 2014 | 72 | 22 | 6 |
| :--- | :--- | :--- | :--- |
| Apr 28-May 12, 2009 | 74 | 17 | 9 |

## ASK ALL:

Q. 13 Which of these comes closer to your view? [READ AND RANDOMIZE RESPONSE OPTIONS]

| Aug 15-25, <br> $\frac{2014}{61}$ | Government investment in research is ESSENTIAL for scientific progress <br> [OR] | Apr 28-May 12, |
| :---: | :--- | :---: |
| 34 | Private investment will ensure that enough scientific progress is made, <br> even without government investment | 29 |
| 5 | Don't know/Refused (VOL.) |  |

## NO QUESTION 14-15

## 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?

|  | Total | ---Evolved Due to natural processes | over time---Supreme being guided evolution | $\begin{gathered} \text { (VOL.) } \\ \text { DK/ } \\ \underline{R e f} \end{gathered}$ | Existed in present form since beginning | $\begin{gathered} \text { (VOL.) } \\ \text { DK/ } \\ \text { Ref } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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, $2009{ }^{61}$ | 61 | 32 | 22 | 7 | 31 | 8 |
| ENDS FOR COMPARISON: |  |  |  |  |  |  |
| AAS scientists survey |  |  |  |  |  |  |
| Sept 11-Oct 13, $2014{ }^{62}$ | 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:
Aug 15-25,

| $\frac{2014}{66}$ | Yes, scientists generally agree that humans <br> evolved over time |
| :---: | :--- |
| 29 | No, scientists do not generally agree that humans <br> evolved over time <br> Don't know/Refused (VOL.) |


| Apr 28- <br> May 12, <br> $\frac{2009}{60}$ | July <br> $\frac{2006}{63}$ | July <br> 62 |
| :---: | :---: | :---: |
| 28 | 28 | 33 |
| 11 | 10 | 13 |

NO QUESTION 19

[^3]
## [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]:

| $\begin{gathered} \text { Aug 15-25, } \\ \underline{2014} \end{gathered}$ | $\begin{gathered} \text { Apr 28-May } 12, \\ 2009^{64} \end{gathered}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50 | The Earth is getting warmer mostly because of human activity such as burning fossil fuels [OR] |  |  |  |  |
| 23 | The Earth is getting warmer mostly because of natural patterns in the Earth's environment |  |  |  |  |
| 25 | There is no solid evidence that the Earth is getting warmer Don't know/Refused (VOL.) |  |  | er 11 |  |
| 2 |  |  |  | 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 scientists survey ${ }^{65}$ - |  |  |  |  |  |
| Sept 11-Oct 13, 2014 |  | 87 | 9 | 3 | 1 |
| May 1-June 14, 2009 |  | 84 | 10 | 4 | 2 |

[^4]
## [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]?

[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?


## NO QUESTION 22

[^5]
## [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?


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]?
(VOL.)
Favor Oppose DK/Ref
a. The use of animals in scientific research

Aug 15-25, 2014
Apr 28-May 12, 2009
$47 \quad 50 \quad 3$

5243
3

TRENDS FOR COMPARISON:
AAAS scientists survey

| 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 ${ }^{68}$

Aug 15-25, 2014
$45 \quad 51 \quad 4$
Apr 28-May 12, $2009 \quad 51 \quad 42 \quad 7$
TRENDS FOR COMPARISON:
AAAS scientists survey

| 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 ${ }^{69}$

| Aug 15-25, 2014 | 39 | 51 | 10 |
| :--- | :--- | :--- | :--- |
| Sep 4-8, 2013 | 44 | 49 | 7 |
| Mar 13-17, 2013 | 48 | 38 | 14 |
| FOR COMPARISON: |  |  |  |
| cientists survey |  |  |  |
| Sept 11-Oct 13, 2014 | 31 | 66 | 3 |

[^6]
## Q. 24 CONTINUED...

(VOL.)
Favor Oppose DK/Ref
d. The increased use of genetically engineered plants to create a liquid fuel replacement for gasoline
$\begin{array}{llll}\text { Aug 15-25, } 2014 & 68 & 26 & 6\end{array}$
TREND FOR COMPARISON:
AAAS scientists survey
Sept 11-Oct 13, 2014
$78 \quad 21 \quad 2$
e. Allowing more offshore oil and gas drilling in U.S. waters ${ }^{70}$

Aug 15-25, 2014
$52 \quad 44$
$44 \quad 4$
TREND FOR COMPARISON:
AAAS scientists survey
Sept 11-Oct 13, $2014 \quad 32 \quad 66$
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
Q. 25 Thinking about childhood diseases, such as measles, mumps, rubella and polio... [READ AND RANDOMIZE RESPONSE OPTIONS]

| Aug 15-25, | Apr 28-May 12, |  |
| :---: | :---: | :---: |
| $\frac{2014}{68}$ | Should all children be required to be vaccinated [OR] <br> 30 | 2009 $^{71}$ |
| Should parents be able to decide NOT to vaccinate <br> their children | 28 |  |
| 1 | Don't know/Refused (VOL.) | 3 |

## TRENDS FOR COMPARISON:

AAAS scientists survey ${ }^{72}$
Sept 11-Oct 13, 2014
May 1-June 14, 2009
All children should
be required to be
$\frac{\text { vaccinated }}{86}$
82

Parents should be able to decide NOT

| to vaccinate <br> their children | No answer |
| :---: | :---: |
| 13 | 1 |
| 17 | 1 |

## NO QUESTION 26

[^7]
## 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, |  |
| :--- | :--- |
| $\frac{2014}{74}$ Appropriate use of medical advances <br> 23 Taking medical advances too far <br> 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]

| $\begin{gathered} \text { Aug 15-25, } \\ 2014 \end{gathered}$ |  | $\begin{gathered} \text { Mar 21-Apr 8, } \\ \underline{2013} \end{gathered}$ | $\begin{gathered} \text { Apr 6-May 6, } \\ 1999^{73} \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| 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:

$$
\begin{aligned}
& \text { AAAS scientists survey } \\
& \text { Sept } 11 \text {-Oct } 13,2014
\end{aligned}
$$

The growing world population will NOT The growing world be a major population WILL be $\frac{\text { problem... }}{17} \quad \frac{\text { a major problem... }}{82} \quad \frac{\text { No answer }}{*}$

## 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? ${ }^{74}$

Aug 15-25, $\underline{2014}$

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

## TREND FOR COMPARISON:

| AAAS scientists survey |  |  |  |
| :---: | :---: | :---: | :---: |
| Sept 11 -Oct 13,2014 | $\frac{\text { Good investment }}{}$ | 68 | Not a good <br> investment |
| 31 | No answer |  |  |
| 2 |  |  |  |

[^8]
## 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, $\underline{2014}$
59 Essential

39 Not essential
3 Don't know/Refused (VOL.)
TREND FOR COMPARISON:
AAAS scientists survey
Sept 11-Oct 13, 2014


Not essential 52
No answer
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, $\underline{2014}$
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? ${ }^{75}$

Aug 15-25, $\underline{2014}$
15 Appropriate use of medical advances
83 Taking medical advances too far 2 Don't know/Refused (VOL.)

[^9]
## [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?

Aug 15-25,
VCU Life Sciences Survey
$\frac{2014}{46}$
Sept 3-26, $\underline{2003}$
Appropriate use of medical advances
41
50 Taking medical advances too far 54 4 Don't know/Refused (VOL.)

## 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, 2014
28 Generally safe
69 Generally unsafe
3 Don't know/Refused (VOL.)
TREND FOR COMPARISON:
AAAS scientists survey
Sept 11-Oct 13, 2014
$\frac{\text { Generally safe }}{68}$
$\frac{\text { Generally unsafe }}{31}$
No answer
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. ${ }^{76}$
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,
2014
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.)

[^10]
## ASK ALL:

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

Aug 15-25,
$\underline{2014}$
37 Generally safe
57 Generally UNsafe
6 Don't know/Refused (VOL.)

## TREND FOR COMPARISON:

AAAS scientists survey
Sept 11-Oct 13, 2014

Generally safe 88


11
$\frac{\text { No answer }}{1}$

## 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?

|  | ABC News <br> July 2003 | ABC News |
| :--- | :---: | :---: |
| Safe | 46 | July 2001 |
| Unsafe | 46 | 35 |
| No opinion (VOL.) | 9 | 52 |

## 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,
$\underline{2014}$
28 Scientists have a clear understanding
67 Scientists do NOT have a clear understanding 4 Don't know/Refused (VOL.)

Q40 AND 41 HELD FOR FUTURE RELEASE
ASK ALL:
Here's a different kind of question. As far as you know...
[RANDOMIZE KNOSCT14 THROUGH KNOSCT19]

## ASK ALL:

KNOSCT14 Which of these is a major concern about the overuse of antibiotics? [READ AND
RANDOMIZE] [INTERVIEWER NOTE: IF NO ANSWER, PROBE ONCE: We're just looking for your best guess on this.]

| Aug 15-25, | Mar 7-10, |  |
| :---: | :--- | :---: |
| $\frac{2014}{74}$ | It can lead to antibiotic-resistant bacteria (Correct) | $\frac{2013^{77}}{77}$ |
| 26 | NET Incorrect/No answer | 23 |
| 8 | Antibiotics are very expensive | 6 |
| 15 | People will become addicted to antibiotics | 10 |
| 2 | Don't know/Refused (VOL.) | 7 |

## [RANDOMIZE KNOSCT14 THROUGH KNOSCT19]

## ASK ALL:

KNOSCT15 Is the following statement true or false? Lasers work by focusing sound waves. [IF NECESSARY: Is this statement true or false?] [INTERVIEWER NOTE: IF NO ANSWER, PROBE ONCE: We're just looking for your best guess on this.]
Aug 15-25, 2014
Mar 7-10, 2013
(Correct) NET incorrect/
May 19-June 6, 2010

| False | no answer | True | $\underline{D K / R e f}$ |
| :---: | :---: | :---: | :---: |
| 65 | 35 | 27 | 9 |
| 48 | 52 | 19 | 34 |
| 60 | 40 | 21 | 19 |
| 47 | 53 | 21 | 31 |

TREND FOR COMPARISON:

| General Social Survey, 2012 | 45 | 55 | 24 | 31 |
| :--- | :--- | :--- | :--- | :--- |
| General Social Survey, 2010 | 48 | 52 | 19 | 33 |
| General Social Survey, 2008 | 48 | 52 | 24 | 28 |
| General Social Survey, 2006 | 45 | 55 | 17 | 38 |

## [RANDOMIZE KNOSCT14 THROUGH KNOSCT19]

## ASK ALL:

KNOSCT16 Does nanotechnology deal with things that are extremely [READ AND RANDOMIZE]
[INTERVIEWER NOTE: IF NO ANSWER, PROBE ONCE: We're just looking for your best guess on this.]

| Aug 15-25, |  | Mar 7-10, |
| :---: | :--- | :---: |
| $\frac{2014}{64}$ | Small (Correct) | $\frac{2013}{65}$ |
| 36 | NET Incorrect/No answer | 35 |
| 8 | Large | 3 |
| 6 | Cold | 2 |
| 13 | Hot | 4 |
| 1 | Don't know/Refused (VOL.) | 26 |

[^11]
## [RANDOMIZE KNOSCT14 THROUGH KNOSCT19] ASK ALL:

| KNOSCT17 | Which is an example of a chemical reaction? [READ AND RANDOMIZE] |
| :--- | :--- |
|  | [INTERVIEWER NOTE: IF NO ANSWER, PROBE ONCE: We're just looking for your |
|  | best guess on this.] | best guess on this.]


| Aug 15-25, | Mar 7-10, |  |
| :---: | :--- | :---: |
| $\frac{2014}{63}$ | Nails rusting (Correct) | $\underline{2013}$ |
| 37 | NET Incorrect/No answer | 66 |
| 15 | Water boiling | 34 |
| 17 | Sugar dissolving | 12 |
| 5 | Don't know/Refused (VOL.) | 12 |
|  |  | 10 |

[RANDOMIZE KNOSCT14 THROUGH KNOSCT19]

## ASK ALL:

## KNOSCT18

What is the main function of red blood cells? Is it...
[READ AND RANDOMIZE]
[INTERVIEWER NOTE: IF NO ANSWER, PROBE ONCE: We're just looking for your best guess on this.]

| Aug 15-25, | Mar 7-10, |  |
| :---: | :--- | :---: |
| $\frac{2014}{76}$ | To carry oxygen to all parts of the body (Correct) | $\frac{2013}{78}$ |
| 24 | NET Incorrect/No answer | 22 |
| 12 | To fight disease in the body | 9 |
| 8 | To help the blood to clot | 6 |
| 4 | Don't know/Refused (VOL.) | 7 |

[RANDOMIZE KNOSCT14 THROUGH KNOSCT19]

## ASK ALL:

KNOSCT19 What gas do most scientists believe causes temperatures in the atmosphere to rise? Is it [READ AND RANDOMIZE] [INTERVIEWER NOTE: IF NO ANSWER, PROBE ONCE: We're just looking for your best guess on this.]

| Aug 15-25, |  | Mar 7-10 | June 18-21 | Apr 28-May 12 |
| :---: | :--- | :---: | :---: | :---: |
| $\frac{2014}{71}$ | Carbon dioxide (Correct) | $\frac{2013}{58}$ | $\frac{2009}{65}$ | $\frac{2009}{66}$ |
| 29 | NET Incorrect/No answer | 42 | 35 | 34 |
| 9 | Hydrogen | 10 | 7 | 7 |
| 5 | Helium | 8 | 4 | 4 |
| 7 | Radon | 7 | 5 | 6 |
| 7 | Don't know/Refused (VOL.) | 16 | 20 | 17 |

## TOTAL NUMBER CORRECT, KNOSCT14 THROUGH KNOSCT19

| $\begin{gathered} \text { Aug 15-25, } \\ \underline{2014} \end{gathered}$ |  | $\begin{gathered} \text { Mar 7-10 } \\ 2013^{78} \end{gathered}$ |
| :---: | :---: | :---: |
| 27 | 6 of 6 | 23 |
| 20 | 5 of 6 | 20 |
| 20 | 4 of 6 | 20 |
| 14 | 3 of 6 | 15 |
| 10 | 2 of 6 | 10 |
| 7 | 1 of 6 | 8 |
| 1 | 0 of 6 | 4 |

## SELECTED BACKGROUND QUESTIONS ${ }^{79}$

ASK IF EDUCATION IS FOUR YEAR COLLEGE OR UNIVERSITY, SOME POSTGRADUATE OR PROFESSIONAL SCHOOLING, OR POSTGRADUATE OR PROFESSIONAL DEGREE, including master's, doctorate, medical or law degree
SCIDEG Is [INSERT IF EDUC=6,7: your degree] [INSERT IF EDUC=8: one or more of your degrees] in a scientific field, or not?

## AMONG THOSE WITH A COLLEGE DEGREE OR MORE [N=813]

Aug 15-25,
$\underline{2014}$
40 Yes
59 No

* Can't answer, listed area of study [SPECIFY] (VOL.)

0 Don't know/Refused (VOL.)
ASK ALL:
IDEO In general, would you describe your political views as... [READ] very conservative, conservative, moderate, liberal or very liberal?

Aug 15-25,
$\underline{2014^{80}}$
35 Conservative or very conservative
36 Moderate
24 Liberal or very liberal
5 Don't know/Refused

## COMBINATION OF PARTY IDENTIFICATION AND IDEOLOGY

14 Conservative Republican
8 Moderate or liberal Republican
39 Independent
17 Moderate or conservative Democrat
12 Liberal Democrat
10 Other/No preference/Don't know/Refused

[^12]
## ASK ALL:

PARTY In politics TODAY, do you consider yourself a Republican, Democrat, or independent?
ASK IF INDEP/NO PREF/OTHER/DK/REF (PARTY=3,4,5,9):
PARTYLN As of today do you lean more to the Republican Party or more to the Democratic Party?

|  |  |  |  | (VOL.) | (VOL.) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | No | Other | (VOL.) | Lean | Lean |
|  | Republican | Democrat | Independent | preference | party | DK/Ref | Rep | Dem |
| Aug 15-25, 2014 | 22 | 30 | 39 | 5 | * | 3 | 15 | 15 |
| Aug 20-24, 2014 | 24 | 31 | 37 | 4 | 1 | 4 | 15 | 16 |
| Jul 8-14, 2014 | 25 | 34 | 37 | 2 | 1 | 1 | 16 | 15 |
| Apr 23-27, 2014 | 24 | 30 | 41 | 2 | 1 | 2 | 18 | 17 |
| Jan 23-Mar 16, 2014 | - 22 | 31 | 41 | 3 | 1 | 2 | 17 | 17 |
| Feb 14-23, 2014 | 22 | 32 | 39 | 4 | 1 | 2 | 14 | 17 |
| Jan 15-19, 2014 | 21 | 31 | 41 | 3 | 1 | 2 | 18 | 16 |
| Dec 3-8, 2013 | 24 | 34 | 37 | 3 | * | 2 | 17 | 15 |
| Oct 30-Nov 6, 2013 | 24 | 32 | 38 | 4 | * | 2 | 16 | 14 |
| Oct 9-13, 2013 | 25 | 32 | 37 | 3 | 1 | 3 | 16 | 18 |
| Sep 4-8, 2013 | 26 | 32 | 38 | 3 | 1 | 1 | 17 | 15 |
| Jul 17-21, 2013 | 19 | 29 | 46 | 3 | * | 2 | 19 | 18 |
| Yearly Totals |  |  |  |  |  |  |  |  |
| 2013 | 23.9 | 32.1 | 38.3 | 2.9 | . 5 | 2.2 | 16.0 | 16.0 |
| 2012 | 24.7 | 32.6 | 36.4 | 3.1 | . 5 | 2.7 | 14.4 | 16.1 |
| 2011 | 24.3 | 32.3 | 37.4 | 3.1 | . 4 | 2.5 | 15.7 | 15.6 |
| 2010 | 25.2 | 32.7 | 35.2 | 3.6 | . 4 | 2.8 | 14.5 | 14.1 |
| 2009 | 23.9 | 34.4 | 35.1 | 3.4 | . 4 | 2.8 | 13.1 | 15.7 |
| 2008 | 25.7 | 36.0 | 31.5 | 3.6 | . 3 | 3.0 | 10.6 | 15.2 |
| 2007 | 25.3 | 32.9 | 34.1 | 4.3 | . 4 | 2.9 | 10.9 | 17.0 |
| 2006 | 27.8 | 33.1 | 30.9 | 4.4 | . 3 | 3.4 | 10.5 | 15.1 |
| 2005 | 29.3 | 32.8 | 30.2 | 4.5 | . 3 | 2.8 | 10.3 | 14.9 |
| 2004 | 30.0 | 33.5 | 29.5 | 3.8 | . 4 | 3.0 | 11.7 | 13.4 |
| 2003 | 30.3 | 31.5 | 30.5 | 4.8 | . 5 | 2.5 | 12.0 | 12.6 |
| 2002 | 30.4 | 31.4 | 29.8 | 5.0 | . 7 | 2.7 | 12.4 | 11.6 |
| 2001 | 29.0 | 33.2 | 29.5 | 5.2 | . 6 | 2.6 | 11.9 | 11.6 |
| 2001 Post-Sept 11 | 30.9 | 31.8 | 27.9 | 5.2 | . 6 | 3.6 | 11.7 | 9.4 |
| 2001 Pre-Sept 11 | 27.3 | 34.4 | 30.9 | 5.1 | . 6 | 1.7 | 12.1 | 13.5 |
| 2000 | 28.0 | 33.4 | 29.1 | 5.5 | . 5 | 3.6 | 11.6 | 11.7 |
| 1999 | 26.6 | 33.5 | 33.7 | 3.9 | . 5 | 1.9 | 13.0 | 14.5 |
| 1998 | 27.9 | 33.7 | 31.1 | 4.6 | . 4 | 2.3 | 11.6 | 13.1 |
| 1997 | 28.0 | 33.4 | 32.0 | 4.0 | . 4 | 2.3 | 12.2 | 14.1 |
| 1996 | 28.9 | 33.9 | 31.8 | 3.0 | . 4 | 2.0 | 12.1 | 14.9 |
| 1995 | 31.6 | 30.0 | 33.7 | 2.4 | . 6 | 1.3 | 15.1 | 13.5 |
| 1994 | 30.1 | 31.5 | 33.5 | 1.3 | -- | 3.6 | 13.7 | 12.2 |
| 1993 | 27.4 | 33.6 | 34.2 | 4.4 | 1.5 | 2.9 | 11.5 | 14.9 |
| 1992 | 27.6 | 33.7 | 34.7 | 1.5 | 0 | 2.5 | 12.6 | 16.5 |
| 1991 | 30.9 | 31.4 | 33.2 | 0 | 1.4 | 3.0 | 14.7 | 10.8 |
| 1990 | 30.9 | 33.2 | 29.3 | 1.2 | 1.9 | 3.4 | 12.4 | 11.3 |
| 1989 | 33 | 33 | 34 | -- | -- | -- | -- | -- |
| 1987 | 26 | 35 | 39 | -- | -- | -- | -- | -- |


[^0]:    ${ }_{57}^{56}$ Trends not shown. See Pew Research for trends from 1988 to present.
    ${ }^{57}$ Survey of AAAS members conducted online. The share giving no answer to each question is listed under the "DK/Ref. (VOL.)" column. The question stem for the AAAS survey was "Compared with other industrialized countries, how would you rate the United States with regard to its overall scientific achievements?" RESPONSE OPTIONS: Best in the world; Above average; Average; Below average."

[^1]:    ${ }^{58}$ AAAS scientists question stem was: "Compared to other industrialized countries, how would you rate the United States in the following area... science, technology, engineering and math education for grades K to 12 ?"
    ${ }^{59}$ AAAS scientists question stem: "Compared to other industrialized countries, how would you rate the United States in the following area...medical treatment?"

[^2]:    ${ }^{60}$ In 2009, the question stem did not explicitly mention "in the U.S.". The question wording was: "Has science had a mostly positive or mostly negative effect on the quality of [INSERT ITEM; RANDOMIZE]? What about [NEXT ITEM]? [IF NECESSARY: Has science had a mostly positive or mostly negative effect on the quality of [ITEM]?"

[^3]:    ${ }^{61}$ 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 or not 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.
    62 The nested Q17 responses do not add to the net of $98 \%$ on Q16 due to rounding.
    ${ }^{63}$ 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?"

[^4]:    ${ }^{64}$ 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."
    65 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."

[^5]:    ${ }^{66}$ 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."
    ${ }^{67}$ Prior to October 2013, follow-up question was not asked of those who said there was no solid evidence.

[^6]:    ${ }^{68}$ 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.
    ${ }^{69}$ A Pew Research survey conducted Nov. 6-9, 2014 repeated this question in a three-question set. See "Little Enthusiam, Familiar Divisions After the GOP's Midterm Victory, Q. 69 on the topline.

[^7]:    70 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.
    ${ }^{71}$ 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."
    ${ }^{72}$ AAAS scientists question wording was "Thinking about childhood diseases, such as measles, mumps, rubella and polio, do you think...[RANDOMIZE REPONSE OPTIONS $1 \& 2$ : Parents should be able to decide NOT to vaccinate their children/All children should be required to be vaccinated]"

[^8]:    ${ }_{74}$ In 1999 survey, response options one and two were randomized.
    ${ }^{74}$ 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.

[^9]:    ${ }^{75}$ 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"

[^10]:    ${ }^{76}$ Introduction to question set from ABC News, July 2003

[^11]:    772013 Pew Research Center/Smithsonian Magazine survey. Introduction to series of questions was "Here are some questions about things you might have learned in school or seen in the news. For each statement that I read, please tell me if it is true or false. If you don't know, just tell me so, and we will skip to the next question..." Survey administration did not include probe and was conducted on an omnibus survey.

[^12]:    ${ }^{78} 2013$ Pew Research Center/Smithsonian Magazine survey. Total number correct based on questions asked in both surveys. Note that introduction to the series of questions differed across the two surveys. The 2013 survey encouraged respondents to give a "don't know" response and did not probe for respondents best guess. Alpha reliability coefficient for the six item scale of knowledge about science based is 0.62 in 2014 and 0.68 in 2013.
    ${ }^{79}$ See questionnaire for question wording on demographic background questions.
    ${ }^{80}$ Trends not shown.

