Disclosing systematic misconceptions related to each of the UN's Sustainable Development Goals

a study by

GAPMINDER

in collaboration with

AFRY
ÅF PÖYRY

First: Test your worldview

Below are the 18 questions of this study. Test yourself before reading the report.
You find the correct answers upside down at the end of the report.

1. What share of the population in high-income countries (like Germany and the USA) live in extreme **poverty** (with less than $2/day)?

[ ] A. Less than 1%
[ ] B. Around 11%
[ ] C. Around 21%

2. What share of the world's population don't have enough **food** to meet their daily needs?

[ ] A. Around 11%
[ ] B. Around 23%
[ ] C. Around 37%

3. What happened to the global **suicide** rate in the last 20 years?

[ ] A. Decreased about 25%
[ ] B. Stayed about the same
[ ] C. Increased about 25%

4. In low-income countries across the world, what share of girls went to **school** until at least age 11 (before the pandemic)?

[ ] A. Around 20%
[ ] B. Around 40%
[ ] C. Around 60%

5. How many **companies** in the world have a woman as top manager or CEO?

[ ] A. Around 2%
[ ] B. Around 10%
[ ] C. Around 18%

6. How many people have access to safe drinking **water** in their home or close by?

[ ] A. Around 30%
[ ] B. Around 50%
[ ] C. Around 70%

7. Of all **energy** used in the world how much comes from natural gas, coal and oil?

[ ] A. Around 41%
[ ] B. Around 61%
[ ] C. Around 81%

8. In 1990, 58% of the world's population lived in **low-income countries**. What is the share today?

[ ] A. Around 9%
[ ] B. Around 37%
[ ] C. Around 61%

9. How much of the world's economy comes from **agriculture**, forestry and fishing?

[ ] A. Around 4%
[ ] B. Around 24%
[ ] C. Around 44%

Test your worldview

10. What share of countries in the world have laws against **sexual harassment** at work?
[ ] A. Less than 35%
[ ] B. Around 55%
[ ] C. More than 75%

11. What share of the world's population live in **megacities** (cities with at least 10 million people)?
[ ] A. Around 8%
[ ] B. Around 28%
[ ] C. Around 48%

12. After water, which **raw material** is most used in the world in terms of volume?
[ ] A. Oil
[ ] B. Sand
[ ] C. Wood

13. How much of the excess heat from **global warming** is absorbed in the oceans?
[ ] A. Around 10%
[ ] B. Around 50%
[ ] C. Around 90%

14. What share of all **plastic waste** in the world ends up in oceans?
[ ] A. Less than 6%
[ ] B. Around 36%
[ ] C. More than 66%

15. Biologists have evaluated the status of 120,000 **plants and animals**. How many are endangered or threatened?
[ ] A. Around 30%
[ ] B. Around 60%
[ ] C. Around 90%

16. What share of the world's population are **refugees**?
[ ] A. Around 0.4%
[ ] B. Around 4.4%
[ ] C. Around 14.4%

17. In high-income countries, how much on average of a government's revenue comes from **customs and import** duties?
[ ] A. Around 2%
[ ] B. Around 12%
[ ] C. Around 22%

18. There are roughly eight billion people in the world today. Which **map** shows best where they live? (Each figure represents 1 billion people.)

A
[ ]

B
[ ]

C
[ ]
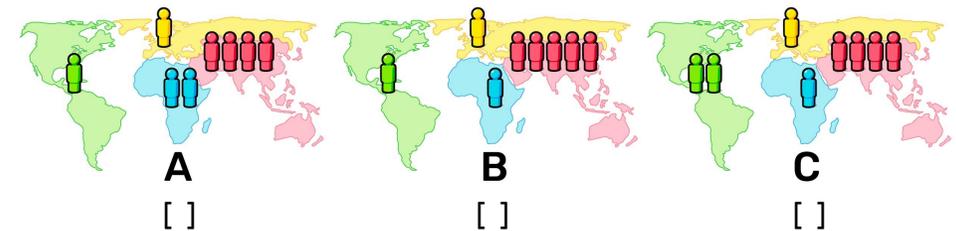
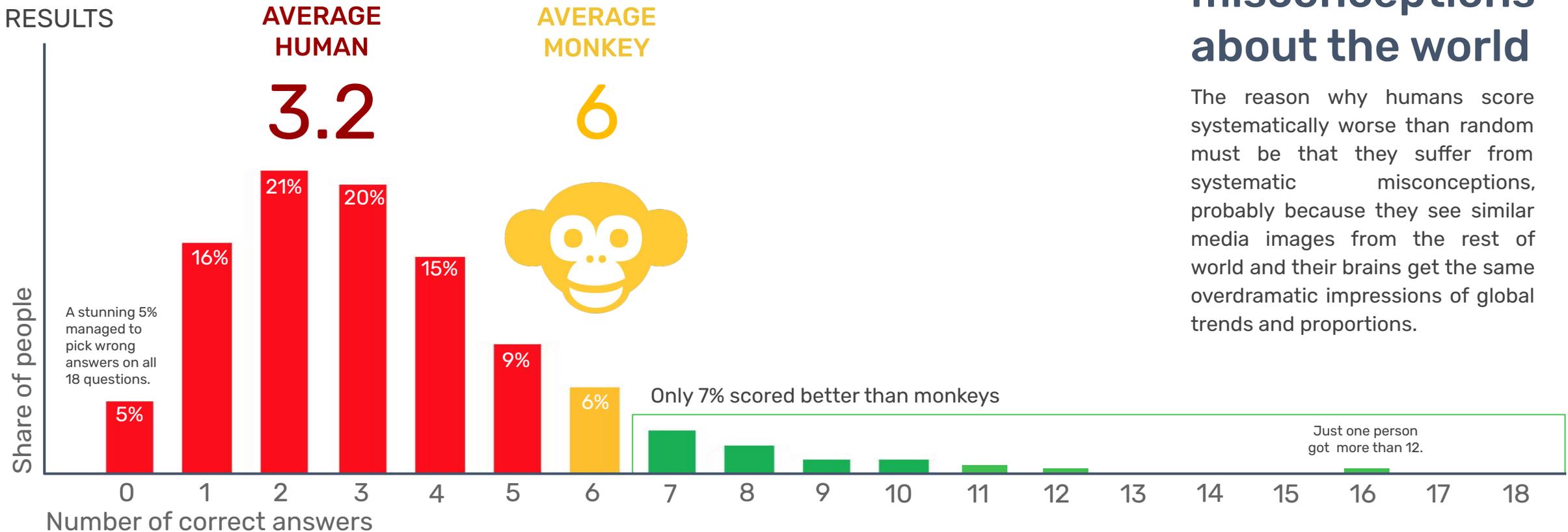# Humans scored worse than monkeys...

Most **humans** got 1 to 4 correct answers. They would have scored better if they had closed their eyes and picked answers randomly. All the questions had three options which means that the average **monkeys** (or humans with closed eyes who don't know what options they choose) would pick the right answer every third time, by pure luck, giving them 6 correct answers out of 18.

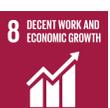## ... because they suffer from systematic misconceptions about the world

The reason why humans score systematically worse than random must be that they suffer from systematic misconceptions, probably because they see similar media images from the rest of world and their brains get the same overdramatic impressions of global trends and proportions.

RESULTS

AVERAGE HUMAN

3.2

AVERAGE MONKEY

6

Share of people

A stunning 5% managed to pick wrong answers on all 18 questions.

5%
16%
21%
20%
15%
9%
6%

Only 7% scored better than monkeys

Just one person got more than 12.

Number of correct answers

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

This shows how many correct answers people got out of 18 possible.

Systematic misconceptions related to UN Sustainable Development Goals

UN GOAL	WRONG ANSWERS	SYSTEMATIC MISCONCEPTION
1 NO POVERTY	77%	think the **poor** in rich countries are much poorer than they actually are
2 ZERO HUNGER	79%	of people have more **hungry** mouths in their heads than there are in reality
3 GOOD HEALTH AND WELL-BEING	94%	have the impression that **suicides** are not becoming less common in the world
4 QUALITY EDUCATION	86%	believe that very few girls in poor countries get a basic **education**
5 GENDER EQUALITY	89%	assume the worst when asked about women's status in **business**
6 CLEAN WATER AND SANITATION	82%	don't realize how many people actually have safe **drinking water**
7 AFFORDABLE AND CLEAN ENERGY	65%	wrongly believe **fossil fuels** no longer provide most of the world's energy
8 DECENT WORK AND ECONOMIC GROWTH	96%	think that there are still many **low-income countries**
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	84%	mistakenly believe that **agriculture**, forestry and fishing yield lots of income

UN GOAL	WRONG ANSWERS	SYSTEMATIC MISCONCEPTION
10 REDUCED INEQUALITIES	92%	think laws against **sexual harassment** aren't widespread
11 SUSTAINABLE CITIES AND COMMUNITIES	77%	massively overestimate how many people live in **huge cities**
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	84%	don't realize how much **sand** is in the products we use every day
13 CLIMATE ACTION	92%	assume that little of the **global warming** is hiding in the seas
14 LIFE BELOW WATER	86%	think more than a third of all **plastic waste** ends up in oceans
15 LIFE ON LAND	62%	overestimate how many known **species** are threatened
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	89%	of people have ten times more **refugees** in their heads than there are in reality
17 PARTNERSHIPS FOR THE GOALS	82%	hugely overestimate how much money rich governments get from **taxes** on imports
	69%	of people don't realize that more than half the world's **population** live in Asia

Monkeys win over humans on sustainability facts

With our heads full of misconceptions we can't build a sustainable future

Predicting the future is often very difficult. To have any chance of succeeding, we first need an accurate understanding of the present. This study shows that the public in the Nordic countries and UK are in a very bad position to plan for a sustainable future, as they are devastatingly wrong about all kinds of global trends and proportions.

For example: Fossil fuels still make up more than 80% of all energy used in the world, but a majority think it's far less. People wrongly believe that the transition to sustainable energy has already come a long way, while almost nothing has changed.

Most people shape their understanding of the world based on news stories. What gets attention in media are events that are newsworthy by being unusual. Slow trends and big proportions almost never make it to the news.

We believe in collective wisdom

You probably believe in democracy and the idea that free elections should determine the future of the world. You probably agree that awareness among consumers can guide businesses to make profit in a more responsible way. And you probably realize that the staff of large organizations are making millions of decisions which will have a more positive impact if they are more knowledgeable.

We believe in collective wisdom, not only the wisdom of a small group of experts advising top level decision makers. This misconception study is part of Gapminder's efforts to fight global misconceptions and make it possible for everyone to have a fact-based worldview. In a changing world, the facts keep changing, and therefore we have built a new tool that will help people rid themselves of common misconceptions and stay up to date in a world that will keep changing. We call it the Worldview Upgrader: gapm.io/upgrader

Ola Rosling & Anna Rosling Rönnlund
Co-founders of Gapminder Foundation

1 NO POVERTY

"What share of the population in high-income countries (like Germany and the USA) live in extreme poverty (with less than $2/day)?"
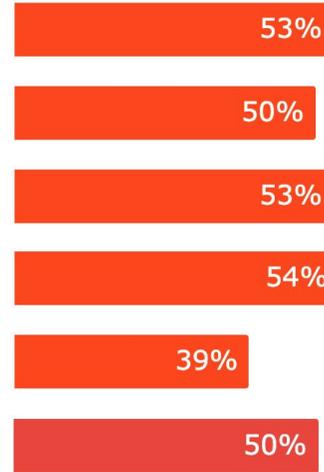
	CORRECT ANSWER "Less than 1%"	WRONG ANSWER "Around 11%"	VERY WRONG ANSWER "Around 21%"
Denmark	21%	53%	26%
Finland	29%	50%	21%
Norway	21%	53%	26%
Sweden	27%	54%	19%
UK	19%	39%	42%
Average	23%	50%	27%

23%
ANSWERED CORRECT
Less than 1% of people in high-income countries live in extreme poverty, with less than $2/day.
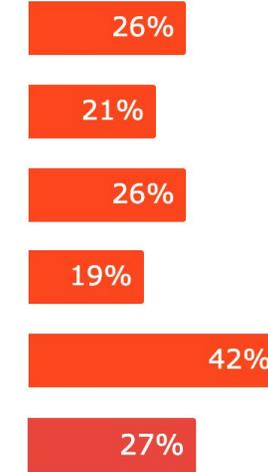
77%
ANSWERED WRONG

think the poor in rich countries are much poorer than they actually are
The poverty they see in rich countries is so undefendable that they probably assume it's the worst kind of poverty. More: gapm.io/wu1

"What share of the world's population don't have enough food to meet their daily needs?"

CORRECT ANSWER	WRONG ANSWER	VERY WRONG ANSWER
"Around 11%"	"Around 23%"	"Around 37%"

	CORRECT	WRONG	VERY WRONG
Denmark	27%	43%	30%
Finland	14%	44%	42%
Norway	26%	43%	31%
Sweden	26%	40%	34%
UK	15%	28%	57%
Average	21%	40%	39%
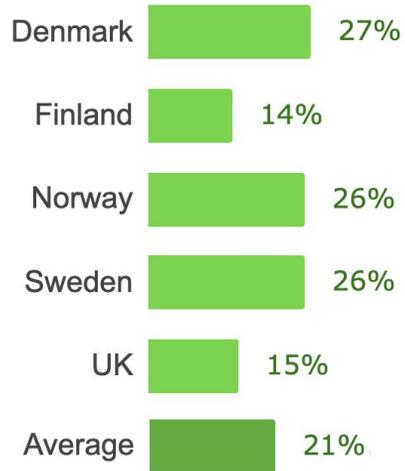
21%
ANSWERED CORRECT
Around 11% of the world's population don't have enough food.
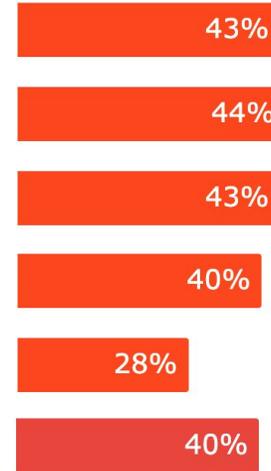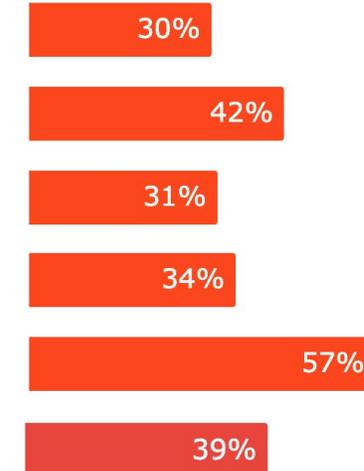
79%
ANSWERED WRONG

of people have more hungry mouths in their heads than there are in reality

People don't want to trivialize suffering, so they often overestimate when guessing about any kind of victims. More: gapm.io/wu2

"What happened to the global suicide rate in the last 20 years?"

3 GOOD HEALTH AND WELL-BEING

CORRECT ANSWER	WRONG ANSWER	VERY WRONG ANSWER
"Decreased about 25%"	**"Stayed about the same%"**	**"Increased about 25%"**

	Decreased about 25%	Stayed about the same%	Increased about 25%
Denmark	4%	33%	63%
Finland	9%	31%	60%
Norway	7%	27%	66%
Sweden	6%	28%	66%
UK	5%	14%	81%
Average	6%	27%	67%

6%
ANSWERED CORRECT
The global suicide rate decreased by around 25% during the past 20 years.
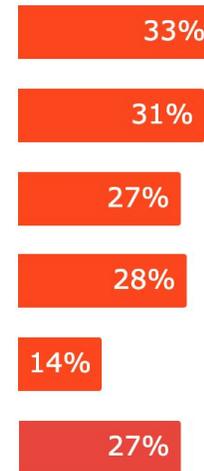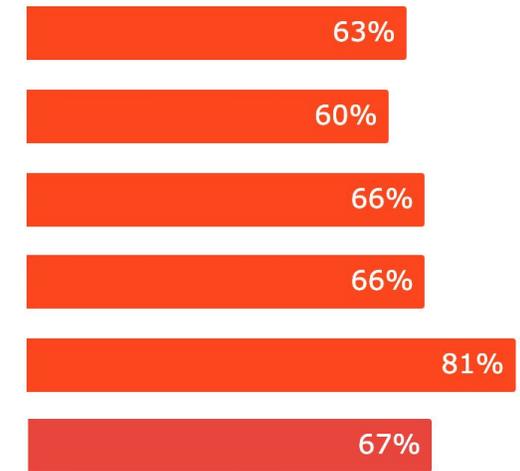
94%
ANSWERED WRONG

have the impression that suicides are not becoming less common in the world

More people talk openly about suicides, and it's easy to get the impression that it is becoming more common. See: gapm.io/wu3

4 QUALITY EDUCATION

"In low-income countries across the world, what share of girls went to school until at least age 11 (before the pandemic)?"

	CORRECT ANSWER "Around 60%"	WRONG ANSWER "Around 40%"	VERY WRONG ANSWER "Around 20%"
Denmark	14%	32%	54%
Finland	14%	35%	51%
Norway	11%	28%	61%
Sweden	17%	32%	51%
* UK	13%	35%	52%
Average	14%	32%	54%

14%
ANSWERED CORRECT
Around 60% of young girls in low-income countries go to school.
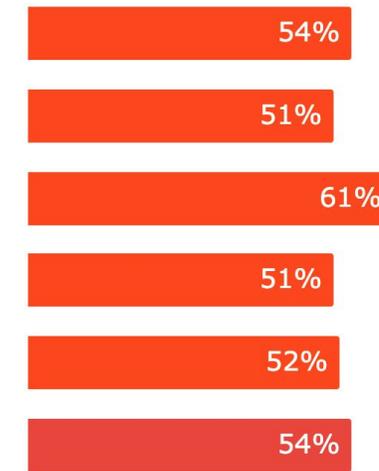
86%
ANSWERED WRONG

believe that very few girls in poor countries get a basic education

As they know there are still huge gender inequalities in the world, they probably can't imagine that most boys - and girls - go to school even in low-income countries. More: gapm.io/wu4

"How many companies in the world have a woman as top manager or CEO?"

	CORRECT ANSWER "Around 18%"	WRONG ANSWER "Around 10%"	VERY WRONG ANSWER "Around 2%"
Denmark	14%	38%	48%
Finland	10%	35%	55%
Norway	5%	38%	57%
Sweden	12%	35%	53%
* UK	14%	36%	50%
Average	11%	36%	53%

11%
ANSWERED CORRECT
Around 18% of companies worldwide have female top managers.
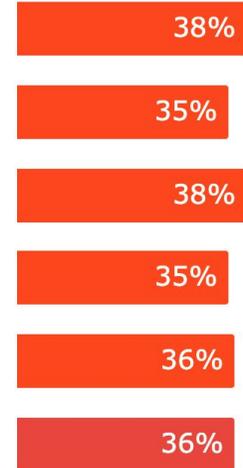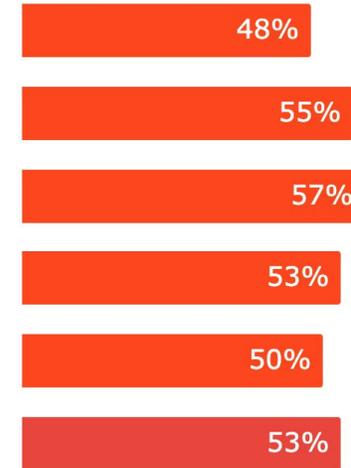
89%
ANSWERED WRONG

assume the worst when asked about women in business
As the world of business is still very male dominated, people underestimate the increasing number of women who actually make it to the top. More: gapm.io/wu5

6 CLEAN WATER AND SANITATION

"How many people in the world have access to safe drinking water in their home or close by?"

	CORRECT ANSWER "Around 70%"	WRONG ANSWER "Around 50%"	VERY WRONG ANSWER "Around 30%"
Denmark	20%	47%	33%
Finland	11%	42%	47%
Norway	17%	38%	45%
Sweden	21%	42%	37%
* UK	20%	37%	43%
Average	18%	41%	41%
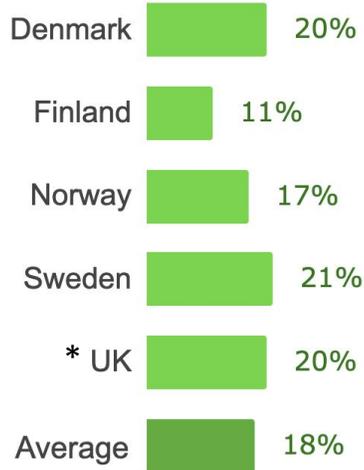
18%
ANSWERED CORRECT
Around 70% of all people have easy access to safe drinking water.
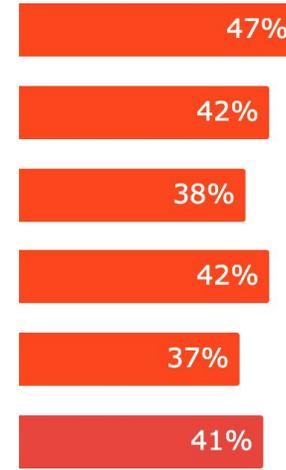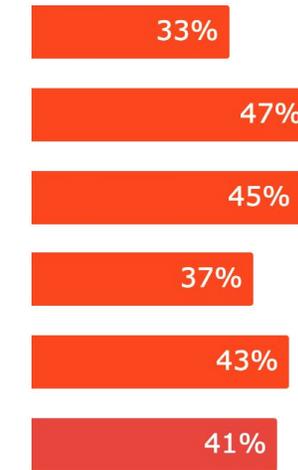
82%
ANSWERED WRONG

don't realize how many people actually have safe drinking water

If you imagine that half of humanity lacks safe drinking water, the problem must seem too big to be solved. More: gapm.io/wu6

7 AFFORDABLE AND CLEAN ENERGY

"Of all energy used in the world how much comes from natural gas, coal and oil?"

	CORRECT ANSWER	WRONG ANSWER	VERY WRONG ANSWER
	"Around 81%"	"Around 61%"	"Around 41%"

	Correct	Wrong	Very Wrong
Denmark	41%	42%	17%
Finland	39%	47%	14%
Norway	32%	50%	18%
Sweden	34%	51%	15%
UK	28%	47%	25%
Average	35%	47%	18%
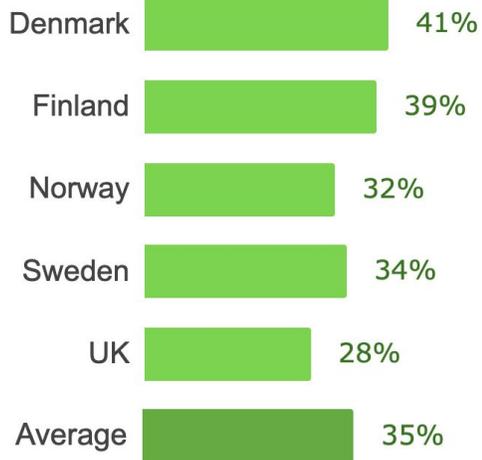
35%
ANSWERED CORRECT
Around 81% of all energy used in the world comes from coal, oil and natural gas.
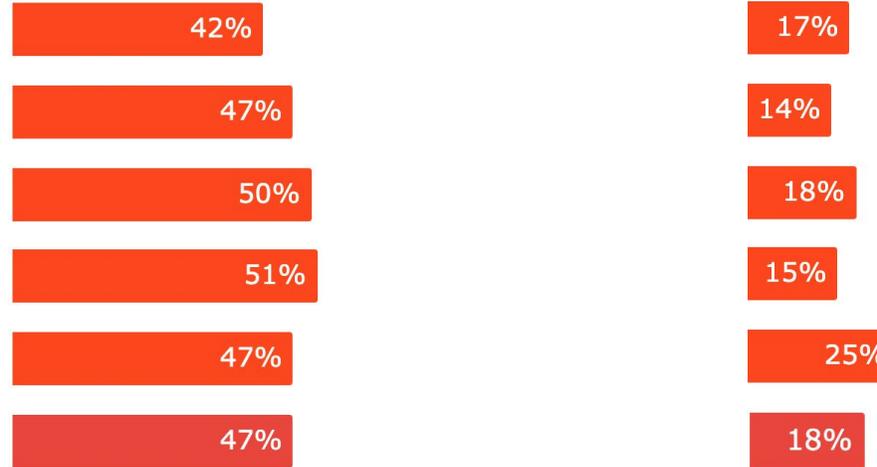
65%
ANSWERED WRONG
wrongly believe fossil fuels no longer provide most of the world's energy

All the talk about new and clean technologies probably makes people wrongly assume that a lot of the fossil fuels have already been replaced. More: gapm.io/wu7

8 DECENT WORK AND ECONOMIC GROWTH
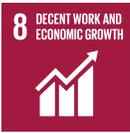
"In 1990, 58% of the world's population lived in low-income countries, what is the share today?"
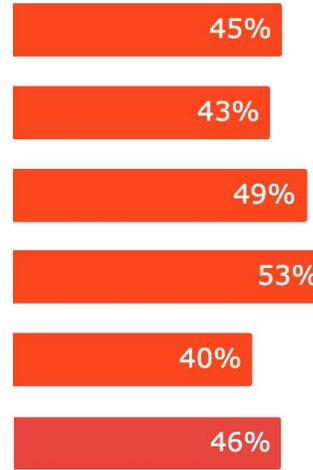
	CORRECT ANSWER *"Around 9%"*	WRONG ANSWER *"Around 37%"*	VERY WRONG ANSWER *"Around 61%"*
Denmark	5%	45%	50%
Finland	2%	43%	55%
Norway	4%	49%	47%
Sweden	6%	53%	41%
* UK	5%	40%	55%
Average	4%	46%	50%

4%
ANSWERED CORRECT
Today, only 9% of people live in low-income countries.
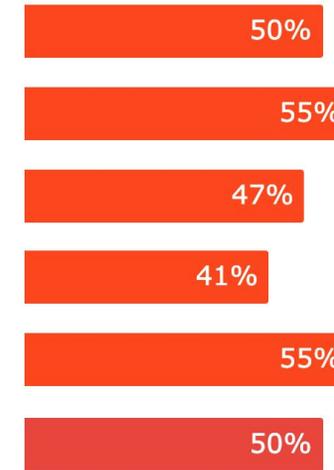
96%
ANSWERED WRONG

think there are still many low-income countries
Nearly everyone missed that most of the world got richer in recent decades and that lots of low-income countries became middle-income countries. More: gapm.io/wu8

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

"How much of the world's economy comes from agriculture, forestry and fishing?"

	CORRECT ANSWER "Around 4%"	WRONG ANSWER "Around 24%"	VERY WRONG ANSWER "Around 44%"
Denmark	10%	54%	36%
Finland	18%	54%	28%
Norway	21%	59%	20%
Sweden	15%	57%	28%
UK	18%	49%	33%
Average	16%	55%	29%
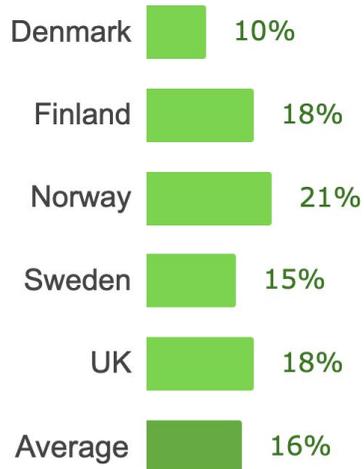
16%
ANSWERED CORRECT
Around 4% of the world's economy comes from agriculture, forestry and fishing.
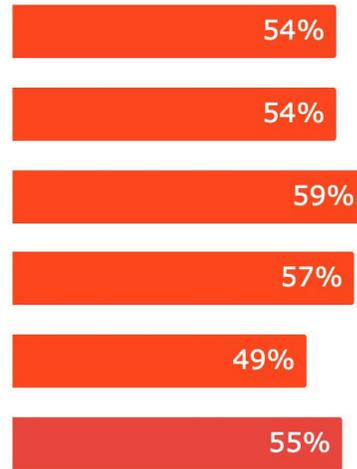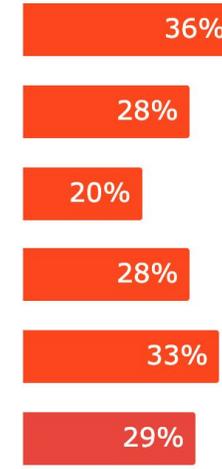
84%
ANSWERED WRONG

mistakenly believe that agriculture, forestry and fishing yield lots of income

During the last 200 years, the share of the world's economy that comes from agriculture, forestry and fishing has been dropping steadily. More: gapm.io/wu9

"What share of countries in the world have laws against sexual harassment at work?"

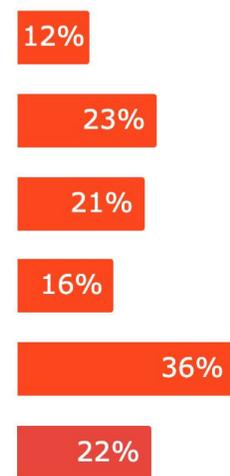|	CORRECT ANSWER "More than 75%"	WRONG ANSWER "Around 55%"	VERY WRONG ANSWER "Less than 35%"
Denmark	5%	12%	83%
Finland	7%	23%	70%
Norway	6%	21%	73%
Sweden	5%	16%	79%
*UK	17%	36%	47%
Average	8%	22%	70%

8%
ANSWERED CORRECT
Around 75% of countries have laws against sexual harassment at work.
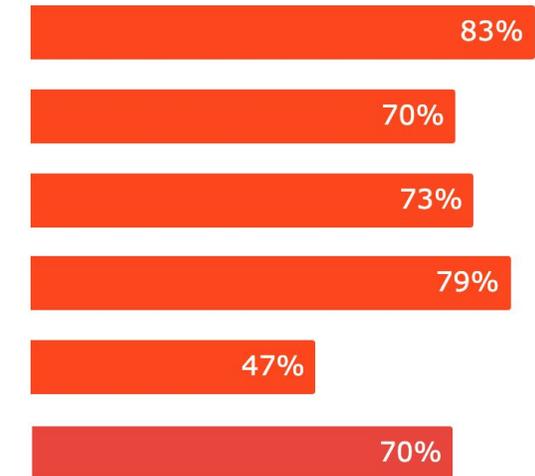
92%
ANSWERED WRONG

think laws against sexual harassment aren't wide spread

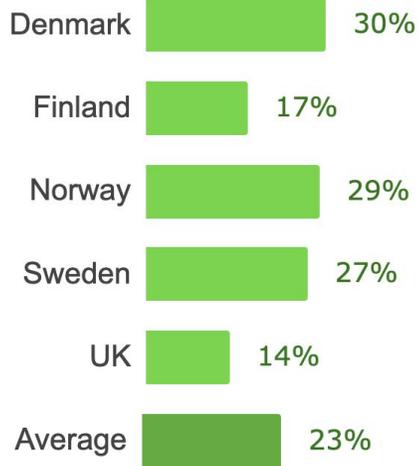In most cases the laws are in place. It's the enforcement of the laws that is the problem. More: gapm.io/wu10

11 SUSTAINABLE CITIES AND COMMUNITIES

"What share of the world's population live in megacities (cities with at least 10 million people)?"

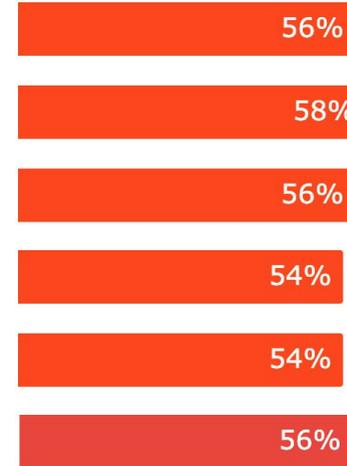|	CORRECT ANSWER *"Around 8%"*	WRONG ANSWER *"Around 28%"*	VERY WRONG ANSWER *"Around 48%"*
Denmark	30%	56%	14%
Finland	17%	58%	25%
Norway	29%	56%	15%
Sweden	27%	54%	19%
UK	14%	54%	32%
Average	23%	56%	21%

23%
ANSWERED CORRECT
Around 8%(or less) of the world's population live in megacities.
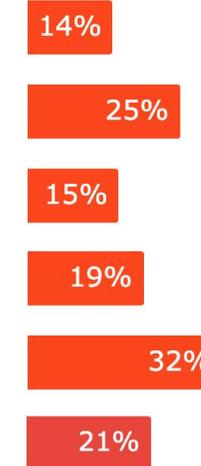
77%
ANSWERED WRONG

massively overestimate how many people live in huge cities
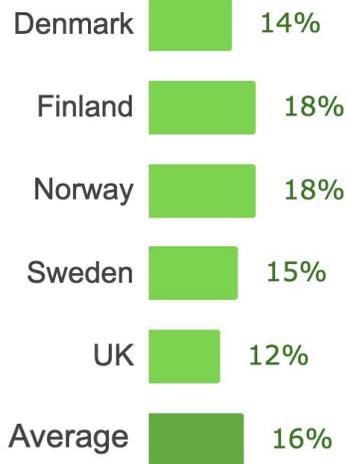
Media often covers people living in the big cities, while almost everyone live in other places. More: gapm.io/wu11

"After water, which raw material is most used in the world in terms of volume?"

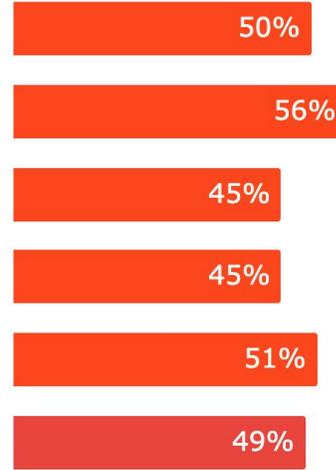|	CORRECT ANSWER *"Sand"*	WRONG ANSWER *"Oil"*	VERY WRONG ANSWER *"Wood"*
Denmark	14%	50%	36%
Finland	18%	56%	26%
Norway	18%	45%	37%
Sweden	15%	45%	40%
UK	12%	51%	37%
Average	16%	49%	35%

16%
ANSWERED CORRECT
Ten times more sand is used compared to oil and wood.
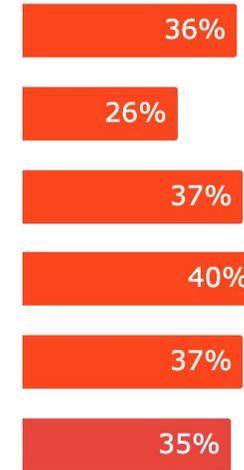
84%
ANSWERED WRONG

don't realize how much sand is in the products we use every day

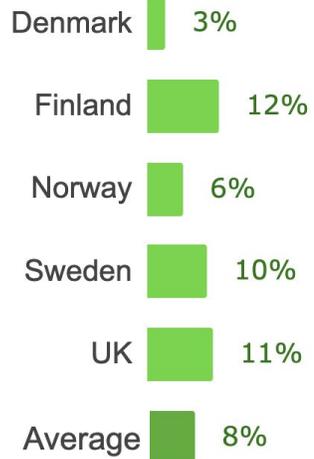If we don't keep track of data, we easily miss invisible materials with huge environmental impacts. More: gapm.io/wu12

"How much of the excess heat from global warming is captured in the oceans?"
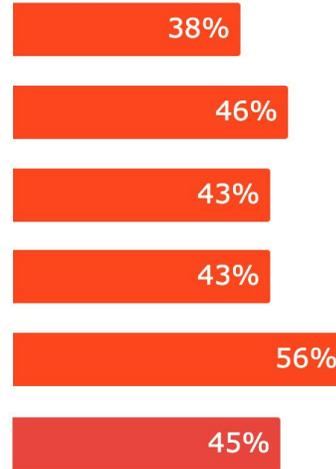
	CORRECT ANSWER "Around 90%"	WRONG ANSWER "Around 50%"	VERY WRONG ANSWER "Around 10%"
Denmark	3%	38%	59%
Finland	12%	46%	42%
Norway	6%	43%	51%
Sweden	10%	43%	47%
UK	11%	56%	33%
Average	8%	45%	47%

8%
ANSWERED CORRECT
More than 90% of global warming is captured in oceans.
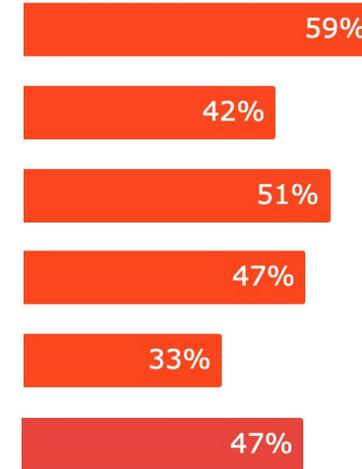
92%
ANSWERED WRONG

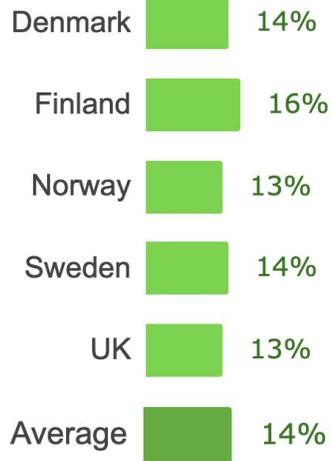### assume that little of the global warming is hiding in the seas

If they don't realize that oceans have absorbed most of the excess heat, they can't understand the size of the climate change. More: gapm.io/wu13

"What share of all plastic waste in the world ends up in the oceans?"

	CORRECT ANSWER	WRONG ANSWER	VERY WRONG ANSWER
	"Less than 6%"	"Around 36%"	"More than 66%"
Denmark	14%	63%	23%
Finland	16%	58%	26%
Norway	13%	54%	33%
Sweden	14%	62%	24%
UK	13%	33%	54%
Average	14%	54%	32%

14%
ANSWERED CORRECT
Less than 6% of plastic waste ends up in the oceans.
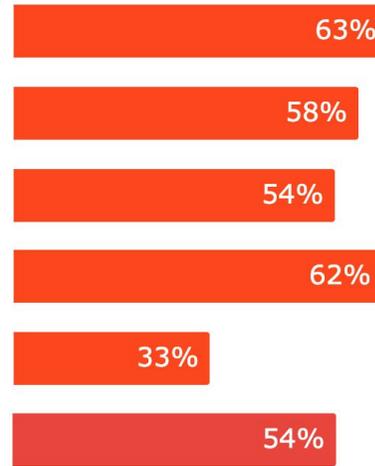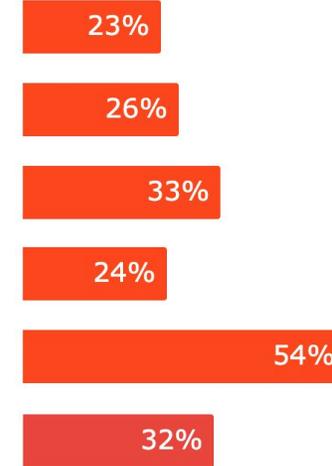
86%
ANSWERED WRONG

think more than a third of all plastic waste ends up in oceans

When you completely overestimate how much plastic ends up in the sea, the problem might seem too big to solve. More: gapm.io/wu14

15 LIFE ON LAND

"Biologists have evaluated the status of 120,000 plants and animals. How many are endangered or threatened?"

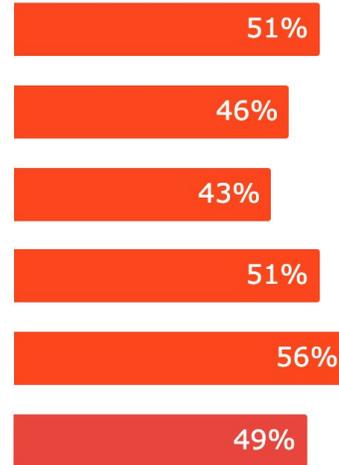| CORRECT ANSWER	WRONG ANSWER	VERY WRONG ANSWER
"Around 30%"	"Around 60%"	"Around 90%"

	CORRECT "Around 30%"	WRONG "Around 60%"	VERY WRONG "Around 90%"
Denmark	42%	51%	
Finland	43%	46%	
Norway	51%	43%	
Sweden	35%	51%	14%
UK	18%	56%	26%
Average	38%	49%	13%

38%
ANSWERED CORRECT
Around 30% of all evaluated species are threatened or endangered.

62%
ANSWERED WRONG

overestimate how many known species are threatened
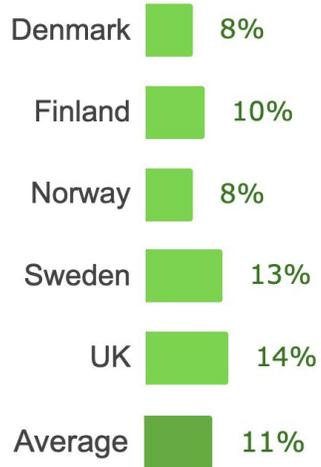
One third threatened species is terribly high, but it means it's still possible to reverse the trend towards mass extinction. More: gapm.io/wu15

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

"What share of the world's population are refugees?"

CORRECT ANSWER	WRONG ANSWER	VERY WRONG ANSWER
"Around 0.4%"	*"Around 4.4%"*	*"Around 14.4%"*

	CORRECT ANSWER "Around 0.4%"	WRONG ANSWER "Around 4.4%"	VERY WRONG ANSWER "Around 14.4%"
Denmark	8%	56%	36%
Finland	10%	56%	34%
Norway	8%	57%	35%
Sweden	13%	50%	37%
UK	14%	36%	50%
Average	11%	51%	38%

11%
ANSWERED CORRECT
Around 0.4% of the world's population are refugees.
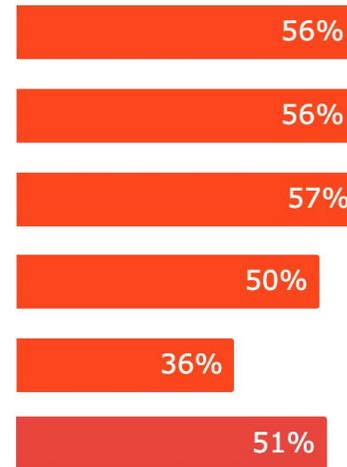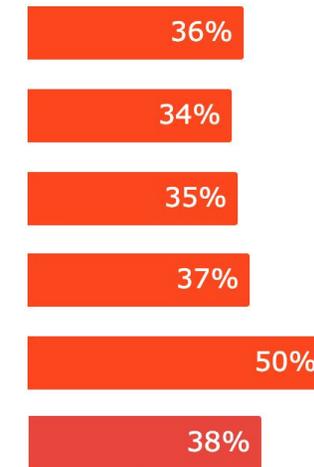
89%
ANSWERED WRONG

have ten times more refugees in their heads than there are in reality

Refugees are in the news all the time, so it isn't surprising most people get this wrong. More: gapm.io/wu16

17 PARTNERSHIPS FOR THE GOALS

"In high-income countries, how much on average of a government's revenue comes from customs and import duties?"
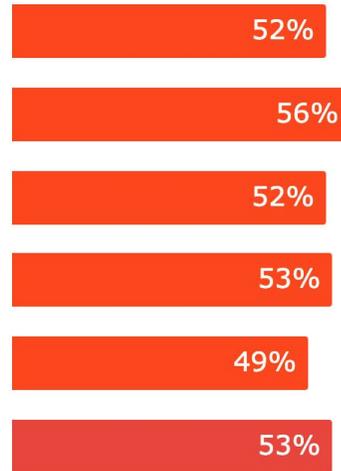
	CORRECT ANSWER	WRONG ANSWER	VERY WRONG ANSWER
	"Around 2%"	**"Around 12%"**	**"Around 22%"**
Denmark	10%	52%	38%
Finland	22%	56%	22%
Norway	19%	52%	29%
Sweden	26%	53%	21%
*UK	15%	49%	36%
Average	18%	53%	29%

18%
ANSWERED CORRECT
Around 2% of a government's revenue in high-income countries comes from import duties.
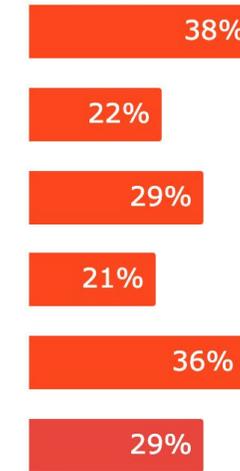
82%
ANSWERED WRONG

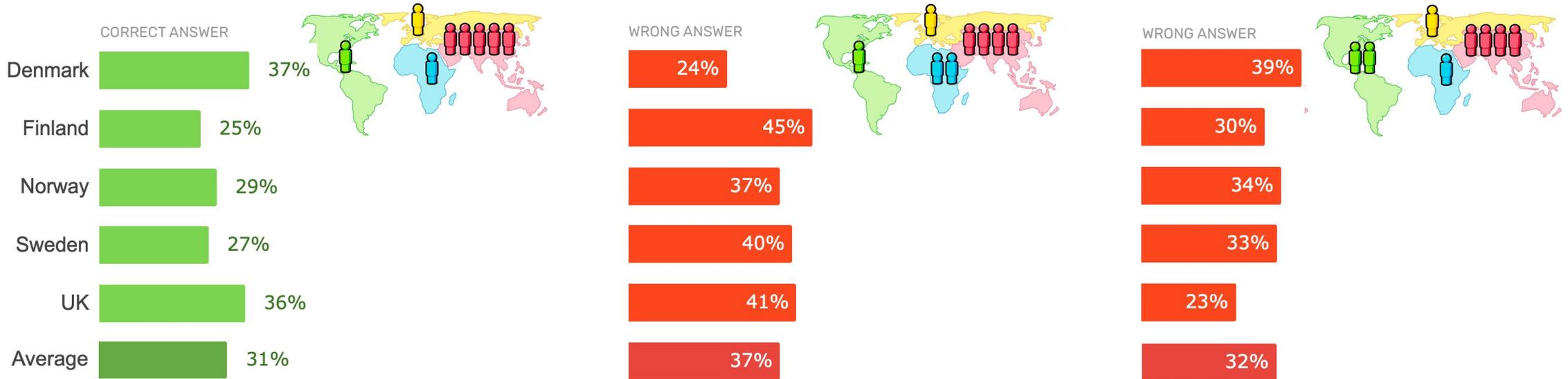**hugely overestimate how much rich governments get from taxes on imports**

As more products than ever are imported from abroad, people assume that taxes on imports result in lots of revenue. More: gapm.io/wu17

"There are roughly 8 billion people in the world today. Which map shows best where they live? (Each figure represents 1 billion people)"

CORRECT ANSWER

Denmark		37%
Finland		25%
Norway		29%
Sweden		27%
UK		36%
Average		31%

WRONG ANSWER

	24%
	45%
	37%
	40%
	41%
	37%

WRONG ANSWER

	39%
	30%
	34%
	33%
	23%
	32%

31%
ANSWERED CORRECT

More than 4.5 billion people live in Asia, and only 1 billion in each of Europe, Africa and the Americas.

69%
ANSWERED WRONG

don't realize that more than half the world's population live in Asia

Many people have strong opinions about the world but put billions of people on the wrong continent. More: gapm.io/wu18

Summary

The five countries tested in this study, scored more or less equally bad on all eighteen questions.

The first country in the world with a feminist foreign policy, Sweden, did worst on the question about laws against sexual harassment. A whopping 95% of Swedes underestimate the progress in this area. Probably because gender inequality is an enormous global problem which gets a lot of attention in Swedish media.

We're not trying to trivialize any of the problems related to these questions. We are convinced that, if more people get the global trends and proportions right in their heads, and if more people realize the progress that has actually been made, then they will better see what is possible to do next and they can more constructively try to solve the problems.

In all five countries a majority believed that the world has already made a lot of progress towards clean energy, away from fossil fuels, which isn't remotely true.

People were most wrong about mental health and income. For instance, 96% overestimated dramatically how many live in low-income countries. Poverty, in all its forms, is so unacceptable to most of us, that we can't help overestimating the numbers. But when doing so, we also overestimate the challenge of helping the poor.

This is not an academic study and we haven't investigated all the possible origins of the systematic misconceptions we present. Instead we hope others will be inspired to do so. We would love to better understand the social and psychological reasons why so many people are wrong in the same way.

For example: The idea that more than 60% of all plastic waste ends up in the oceans, is outlandishly wrong. Why did almost half of the UK respondents pick that answer, but only a quarter of the Finns? Is it because UK is an island and fewer Finns live by the sea?

No matter their origins, we are convinced that misconceptions are useless guides for planning a sustainable future, and therefore we will keep hunting them down, and disclosing them.

Please help promote a fact-based worldview, by spreading this study. We have also found hundreds of more misconceptions related to the UN's Sustainable Development Goals, which we will soon publish on: Twitter, Facebook, Instagram and Linkedin

Stay tuned!
/The Gapminder Team

About the study

The surveys in four nordic countries were conducted by Novus in October 2020. A total of 1,036 random and representative interviews were conducted with members of the public (18–79 years of age) in Sweden, Norway, Denmark and Finland. In the reference country, the UK, the survey was conducted by Google Surveys various weeks during 2020, with 150 respondents per question.

    The results presented in this study come from online panels that are somewhat representative of the population as a whole. But the precision of the data is not high enough to say much about small differences between countries' results in the range of 5% up or down.

    The total results presented for each question across all countries' surveys was simply calculated by taking the mean of the five countries' results.

    The surveys for the four Nordic countries and the UK were done at different times, Some questions had slightly different phrasing in the UK, see those to the right:

QUESTION	PHRASING USED IN THE UK
4	*In low-income countries across the world, what share of girls goes to school until they are at least 11 years old?*
5	*In what share of companies worldwide is a woman the top manager or CEO?*
6	*How many people in the world have access to safe drinking water in or close to home?*
8	*Thirty years ago, 58% of the world's population lived in low-income countries. What is the share today?*
10	*What share of countries in the world have laws against sexual harassment in employment?*
12	*After water, which raw material is most used in the world?*
14	*How much of all plastic produced in the world ends up in the oceans?*
15	*Biologists have evaluated the status of more than 100,000 plants and animals. How many are endangered or threatened?*
17	*In high-income countries, how much on average of the government's revenue comes from customs and import duties?*

CORRECT ANSWERS ON THE TEST ON PAGE 2&3:
1A 2A 3A 4C 5C 6C 7C 8A 9A 10C 11A 12B 13C 14A 15A 16A 17A 18B

The world keeps changing. What about your worldview?

The Worldview Upgrader
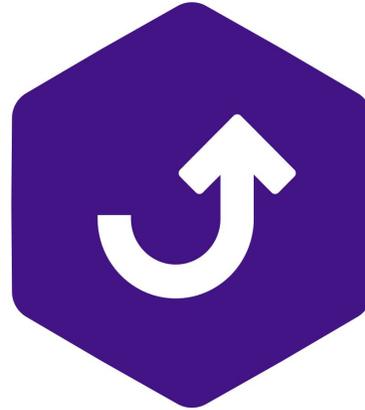
gapm.io/upgrader

It's difficult to stay up to date in a world that is constantly changing.
Gapminder checks the data and test public knowledge
to identify which global trends and proportions most people are wrong about.
The Worldview Upgrader is a service that helps people and organizations
replace common misconceptions with updated facts.

Gapminder is an independent educational non-profit specialized in global misconceptions.