



2 – Examine your knowledge

Your second challenge is to examine your knowledge about the world. Because without factual knowledge about the state of the world, it will be difficult to examine and understand the importance of the Global Goals and how you and your school can contribute to achieve the Global Goals.

1. **Your first challenge is to fill out a questionnaire with 13 questions and examine your percentage of correct answers (Enclosure 1)**

Print the questionnaire so each of you has her/his own copy or use a projector or whiteboard to present the questionnaire in plenum.

Answer the questions **individually or in pairs**. Find a paper and a pencil and answer the thirteen fact questions by writing for instance 1a, 2b, 3c etc.

When everybody has finished, your teacher will present the correct answers.

You score one point for each correct answer. Write your total score on your piece of paper.

Collect all the questionnaires and the teacher and/or a couple of learners add up how many percentages of the answers of all learners were correct.

Examine your knowledge of the world

(Enclosure 1)

1. In all low-income countries across the world today, how many girls finish primary school?

- A. 20%
- B. 40%
- C. 60%

2. Where does the majority of the world population live?

- A. Low income countries
- B. Middle income countries
- C. High income countries

3. In the last 20 years the proportion of the world population living in extreme poverty has....

- A. almost doubled
- B. remained more or less the same
- C. almost halved

4. What is the life expectancy of the world today? A. 50 years

- B. 60 years
- C. 70 years

5. There are 2 billion children in the world today aged 0-15 years old, how many children will there be in year 2100 according to the United Nations?

- A. 4 billion
- B. 3 billion
- C. 2 billion

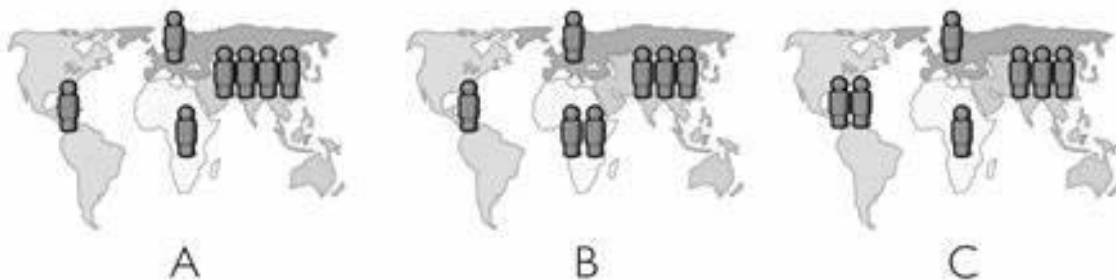
6. The UN predicts that by 2100 the world population will have increased by another 4 billion people, what is the main reason?

- A. There will be more children aged below 15
- B. There will be more adults aged 15-74
- C. There will be more very old people aged 75 and older

7. How did the number of deaths per year from natural disasters change over the last 100 years?

- A. More than doubled
- B. Remained about the same
- C. Decreased to less than half

8. There are roughly 7 billion people in the world today, which options more accurately represents where they live?



9. How many of the world's 1-year-old children today have been vaccinated against some disease?

- A. 20%
- B. 50%
- C. 80%

10. Worldwide, 30-year-old men have spent 10 years in school on average, how many years have women of the same age spent in school?

- A. 9 years
- B. 6 years
- C. 3 years

11. In 1996 tigers, giant pandas and black rhinos were all listed as endangered, how many of these three species are critically endangered today?

- A. 2 of them
- B. 1 of them
- C. none of them

12. How many people in the world have some access to electricity?

- A. 20%
- B. 50%
- C. 80%

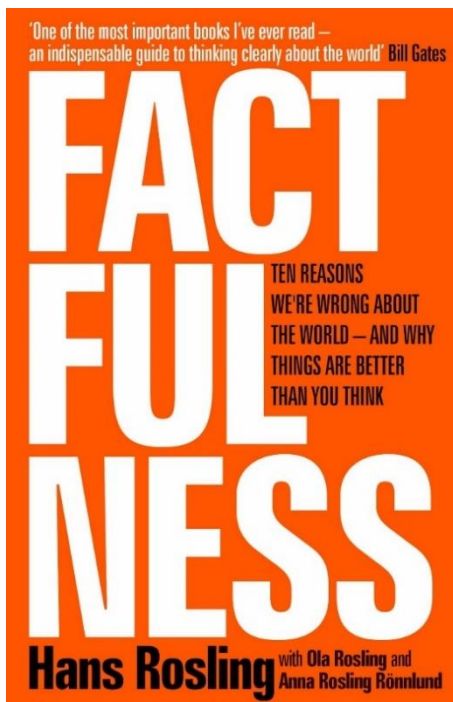
13. Global climate experts believe that over the next 100 years the average temperature will on average?

- A. get warmer
- B. remain the same
- C. get colder?

If you had only a few correct answers, don't worry. You are not alone.

The questionnaire is from the book, *Factfulness*, by Hans Rosling. According to him, everybody seems to systematically get the answers wrong. But why do we know so little about the improvements in the world? Maybe the answers to that question can be found in the book.

- 2. Your second challenge is to examine why we apparently know so little about global development – and what we can do to gain more factual knowledge about the state of the world**



Task 1

First step is that half of you read **the introduction on the back of the book** (see below) and the other half watch the video **A short review of *Factfulness*** (see below).

Take notes and prepare a summary of what you think are the most important aspects of the book and the video according to the introduction and the review.

Then you meet in pairs (one who has read the interview and one who has watched the review) and present your summaries to each other followed by a short debate in plenum.

Introduction on the back of the book

“When asked simple questions about global trends—what percentage of the world's population live in poverty; why the world's population is increasing; how many girls finish school—we systematically get the answers wrong. So wrong that a chimpanzee choosing answers at random will consistently outguess teachers, journalists, Nobel laureates, and investment bankers.

In *Factfulness*, Professor of International Health and global TED phenomenon Hans Rosling, together with his two long-time collaborators, Anna and Ola, offers **a radical new explanation of why this happens**. They reveal **the ten instincts that distort our perspective**—from our tendency to divide the world into two camps (usually some version of us and them) to the way we consume media (where fear rules) to how we perceive progress (believing that most things are getting worse).

Our problem is that we don't know what we don't know, and even our guesses are informed by unconscious and predictable biases.

It turns out that the world, for all its imperfections, is in a much better state than we might think. That doesn't mean there aren't real concerns. But when we worry about everything all the time instead of embracing a worldview based on facts, we can lose our ability to focus on the things that threaten us most”



A short review of *Factfulness*

[Watch the video](#)

(If you want subtitles click on icon number five from the right)

Task 2

Now you are going to meet two of the authors of the book *Factfulness*, Hans Rosling and Ola Rosling in the video **How not to be ignorant about the world**. Watch the first part with Hans (stop at 08:35) and take notes.

Try to sum up in plenum what Hans Rosling wants to tell his audience.

Then watch the second part with Ole. Take notes and try to sum up what he wants to tell his audience. Start at (08:35)



In this TED Talk¹, Hans Rosling presents the results of his public surveys that shows that people do not know key aspects of global development. Ola Rosling shows that this has nothing to do with intelligence. It's a problem of factual knowledge. Facts do not come naturally. Drama and opinions do. Factual knowledge has to be learned. So, Ola teaches us 4 rules of thumb for not being ignorant about the world.

[Watch the video](#) (19:05) (If you want subtitles click on icon number two from the right).

3. Last challenge is to examine some of the tools at [Gapminder's website](#)



Hans and Ola Rosling and Anna Rosling Rønlund have also founded Gapminder Foundation. The mission of the Foundation is almost the same as that of the book *Factfulness*: to fight devastating ignorance with a fact-based worldview that everyone can understand.

¹ [TED Talks are influential videos](#) from expert speakers on education, business, science, tech and creativity, with subtitles in 100+ languages. TED began in 1984 as a conference where Technology, Entertainment and Design converged and today covers almost all topics — from science to business to global issues.

A. Examine four short videos in which Hans Rosling introduces 4 different issues (Enclosure 2)

- a. How many are rich and how many are poor?
- b. Will saving poor children lead to overpopulation?
- c. How did the world population change?
- d. How does income relate to life expectancy?

Watch the videos in pairs. After each video, discuss what Hans's main message is – first with your partner and then in plenum.



How many are rich and how many are poor? [Watch the video](#) (1:50)

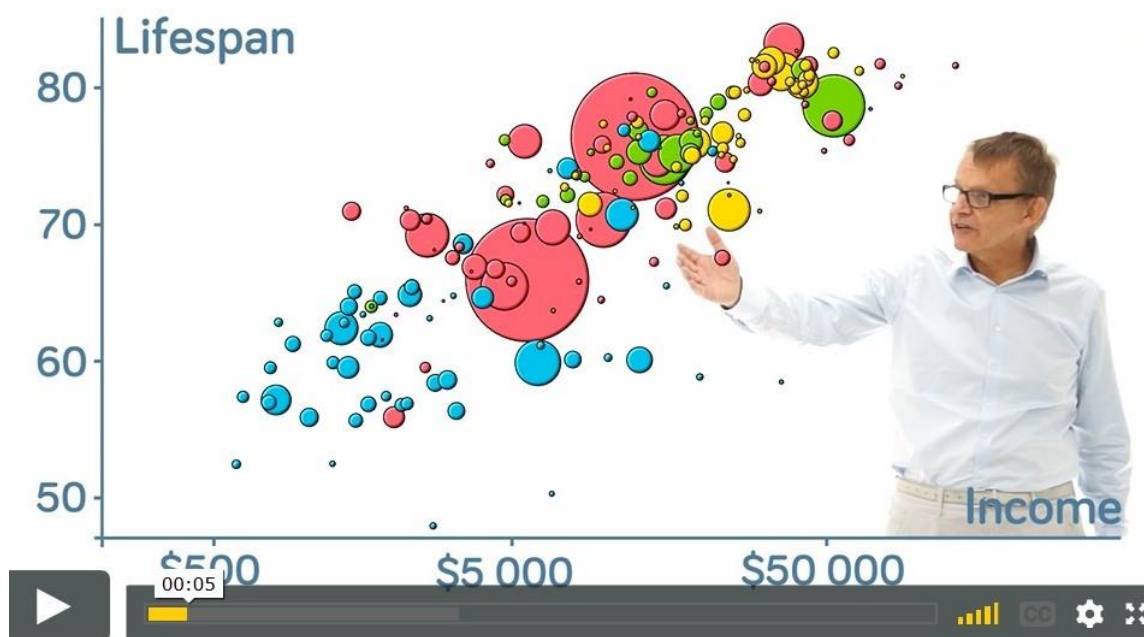


Will saving poor children lead to overpopulation? Watch the [video](#)

World Population



How did the world population change? [Watch the video](#) (1:12)



How does income relate to life expectancy? [Watch the short video](#) (1:45)

B. Examine a challenging data encounter: 16 terrible things and 16 wonderful things (Enclosure 3)

Fortunately, Hans Rosling has more challenging data to show that the world is improving.

IS THE WORLD IN YOUR HEAD STILL GETTING WORSE?

Then get ready for a challenging data encounter. I have 32 more improvements to show you.

For each one, I could tell a similar story to those I have told about extreme poverty and life expectancy. For many of them I could show you that people are consistently more negative than the data says they should be. (And where I can't, it's because we haven't asked these questions yet.)

But I can't fit all these explanations into this book, so here are just the charts. Let's start with 16 terrible things that are on their way out, or have even already disappeared. And then, let's look at 16 wonderful things that have gotten better.



In pairs or groups, begin by examining the 16 terrible things that are on their way out.

Can you agree on which are the five most surprising things and which are the five most important things? Present your results in plenum and see if the whole class can agree on five things as well.

Then you examine 16 good things increasing in the same way.

Communication with your partner school/class

When you have finished, it is time to tell you partner class about your work with knowledge and *Factfulness*.

Here are a few means of expression. a letter to the editor in a local or national newspaper

- pretend you write to your diary

- a cartoon
- a text to a rap song (you might even perform and record it)
- a role play
- a small video where you make a review of what you have experienced
- a news feature in a fictitious television or radio program about your work

You may use one of the above or find other ways to communicate about your experiences, reflections, feelings, what you have learned etc. Pretend that your audience has never heard of *Factfulness* etc. You are welcome to work in pairs/groups of three or four.

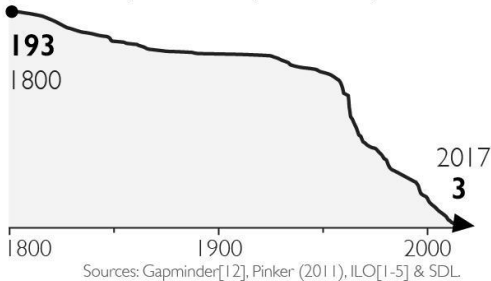


Enclosure 3

16 BAD THINGS DECREASING

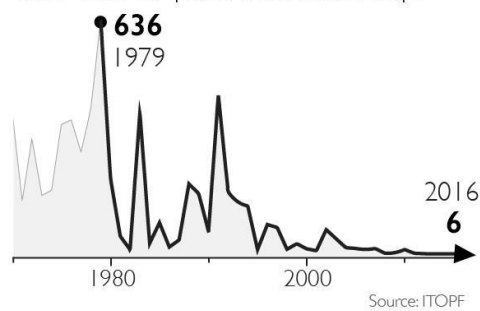
LEGAL SLAVERY

Countries where forced labor is legal or practiced by the state (out of 194)



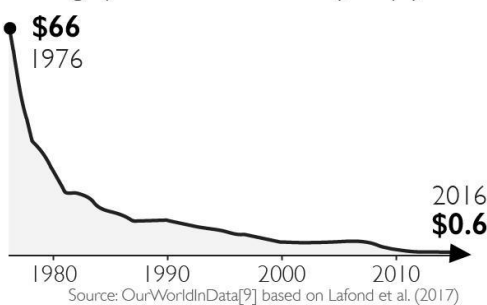
OIL SPILLS

1,000 tons oil spilled from tanker ships



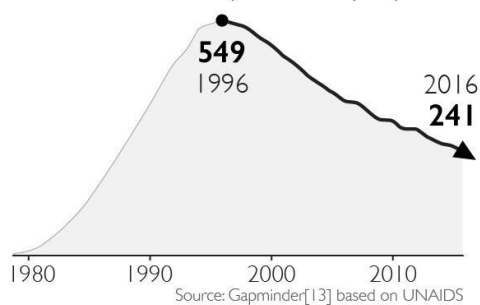
EXPENSIVE SOLAR PANELS

Average price of PV modules (\$/Wp)



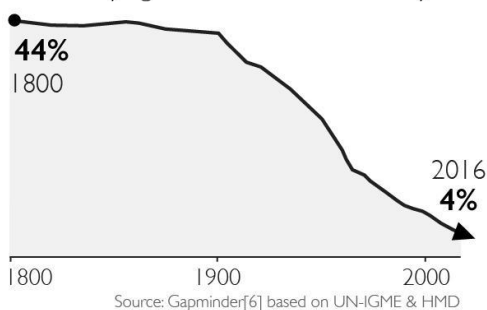
HIV INFECTIONS

New HIV infections per million people



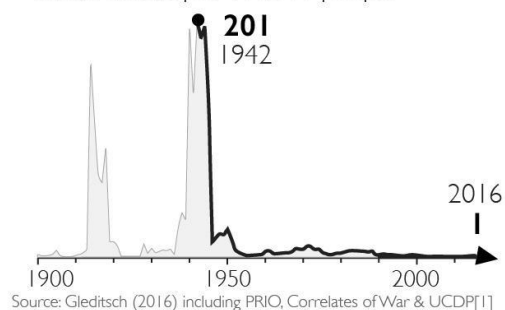
CHILDREN DYING

Percent dying before their fifth birthday



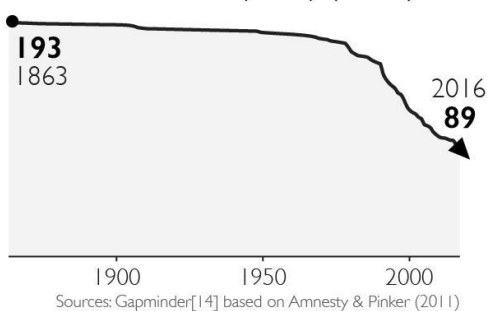
BATTLE DEATHS

Battle deaths per 100,000 people



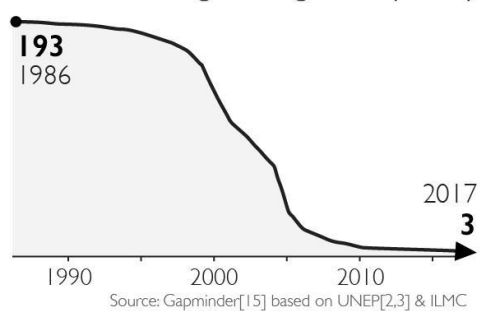
DEATH PENALTY

Countries with death penalty (of 194)



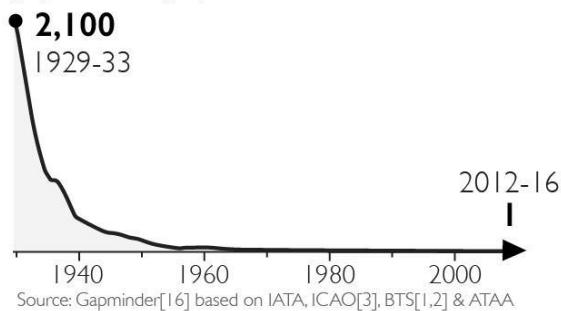
LEADED GASOLINE

Countries allowing lead in gasoline (of 194)



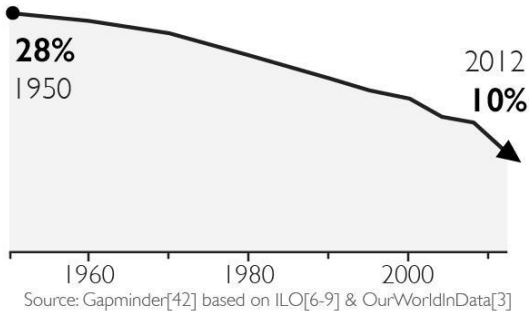
PLANE CRASH DEATHS

Deaths per 10 billion passenger miles
(5-year averages)



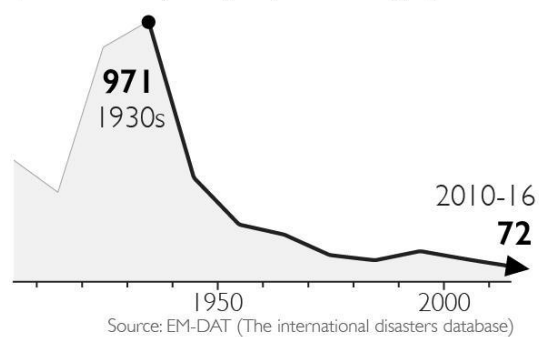
CHILD LABOR

Share of children aged 5-14 who work
full time under bad conditions



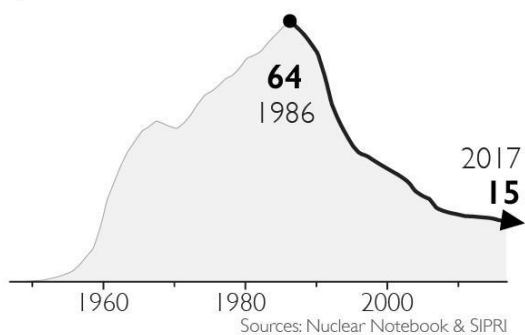
DEATHS FROM DISASTER

1,000 deaths/year (10-year averages)



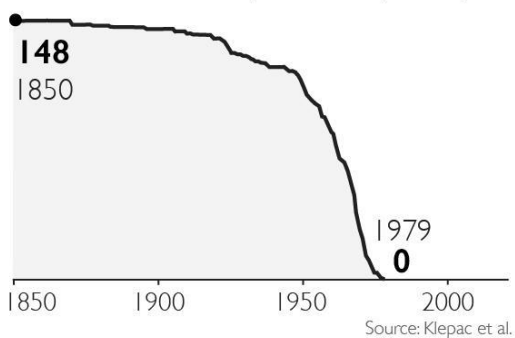
NUCLEAR ARMS

1,000s of nuclear warheads



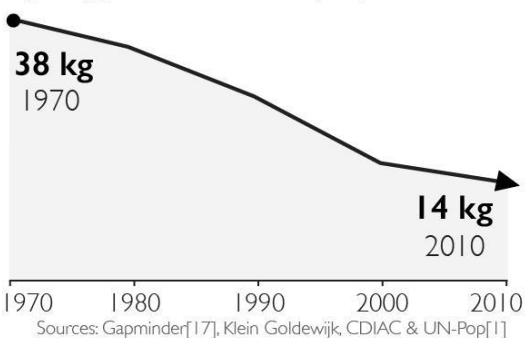
SMALLPOX

Countries with smallpox cases (of 194)



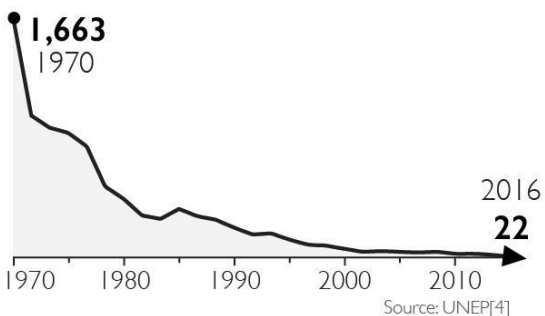
SMOKE PARTICLES

Kg SO₂ particles emitted per person



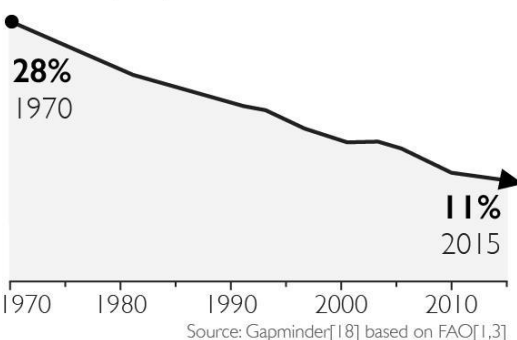
OZONE DEPLETION

1,000 tons ozone-depleting substances
used



HUNGER

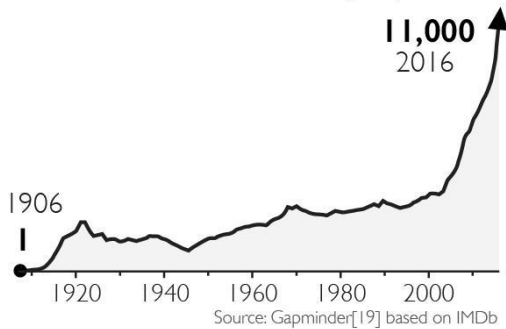
Share of people undernourished



16 GOOD THINGS INCREASING

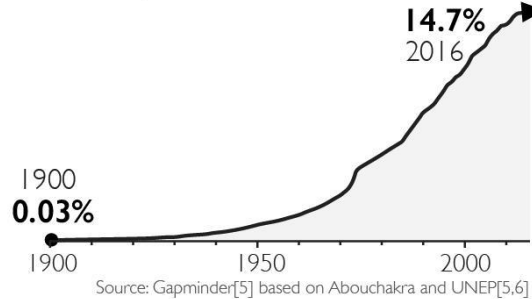
NEW MOVIES

Number of new feature films per year



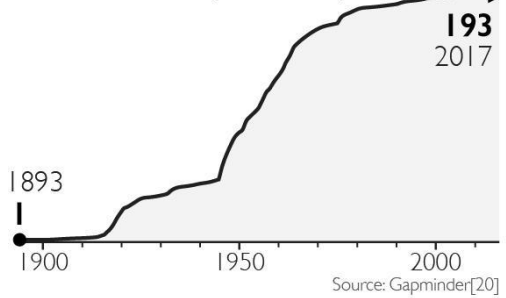
PROTECTED NATURE

Share of Earth's land surface protected as national parks and other reserves



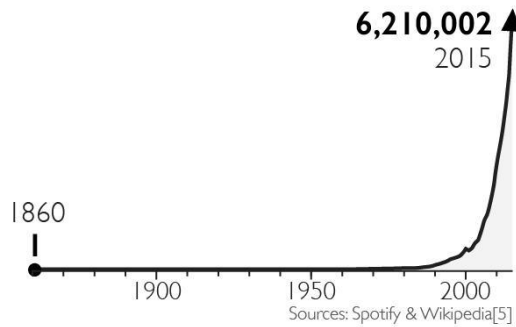
WOMEN'S RIGHT TO VOTE

Countries with equal rights for women and men to vote (out of 194)



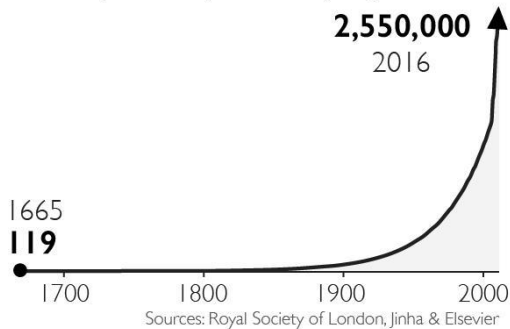
NEW MUSIC

New music recordings per year



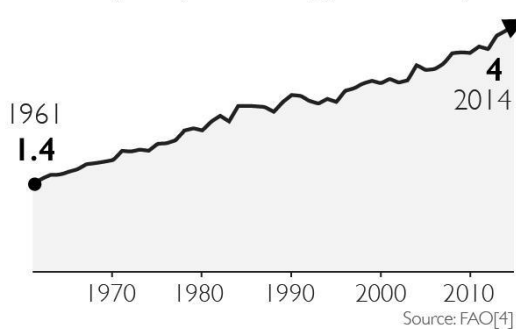
SCIENCE

Scholarly articles published per year



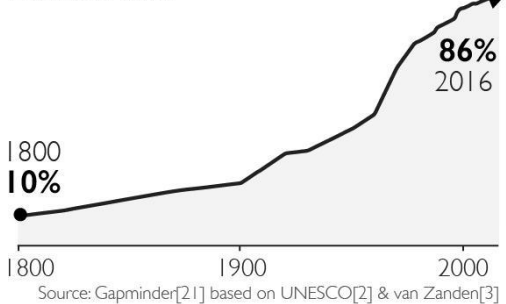
HARVEST

Cereal yield (thousand kg per hectare)



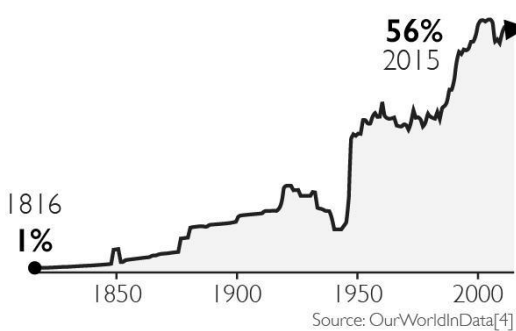
LITERACY

Share of adults (15+) with basic skills to read and write



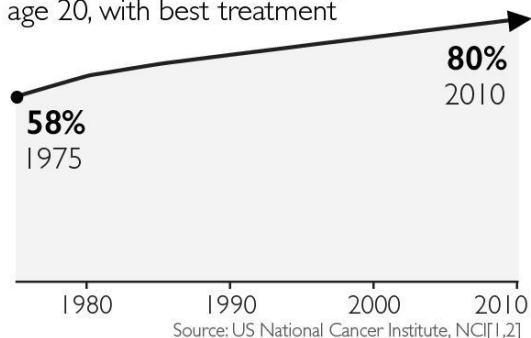
DEMOCRACY

Share of humanity living in democracy



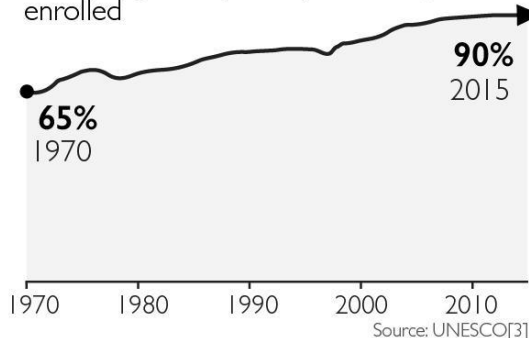
CHILD CANCER SURVIVAL

5 year survival of those diagnosed before age 20, with best treatment



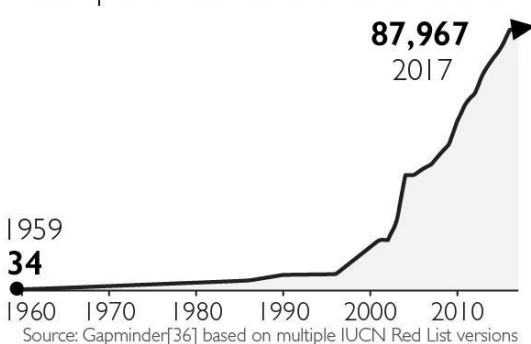
GIRLS IN SCHOOL

Share of girls of primary school age enrolled



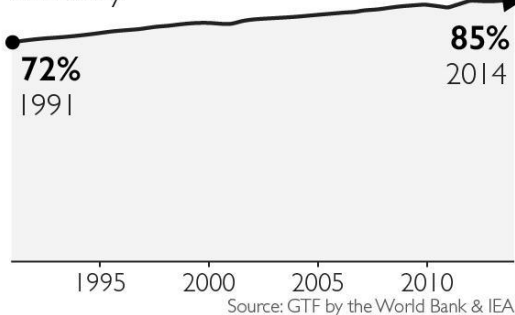
MONITORED SPECIES

Listed species with assessed threat-status



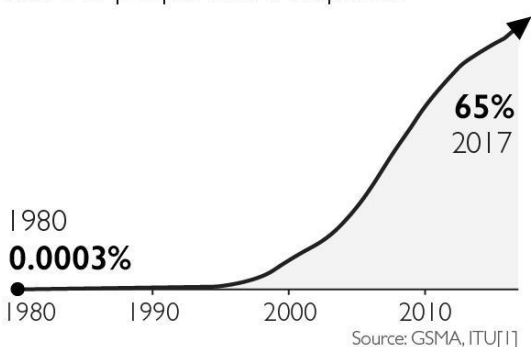
ELECTRICITY COVERAGE

Share of people with some access to electricity



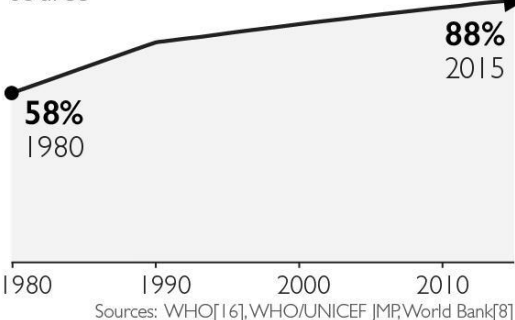
MOBILE PHONES

Share of people with a cellphone



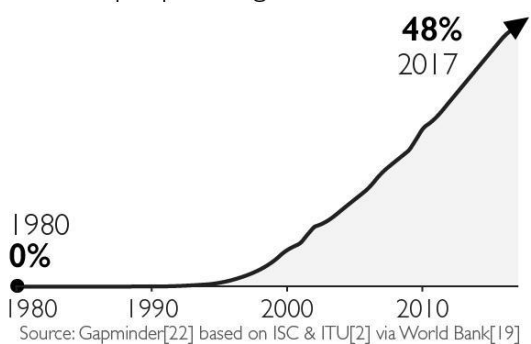
WATER

Share of people with water from protected source



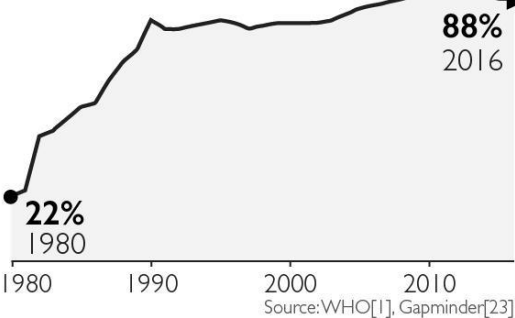
INTERNET

Share of people using the internet



IMMUNIZATION

Share of 1-year olds who got at least one vaccination.



C. Examine our dramatic attention filter and the 10 rules of thumb to critical thinking (Enclosure 4)
(You and your partner school/teacher may choose to skip the pages 17 – 20)

Read the introduction text and have a look at the dramatic attention filter. Debate in plenum whether you agree that we have a filter that prevents us from seeing reality as it is. Try to find some examples where you focus on dramatic information instead of facts or good news.

Next, examine the poster with the ten dramatic instincts in ten groups. Each group is responsible for one of the ten instincts. The task is to illustrate an example of the instinct with a photo, drawing, statistic, text or... Present and explain your illustration in plenum.

Stay in the same 10 groups and have a look at the ten rules of thumb. Each group is responsible for the same number as in the last task. This time, you have to make a small role play to illustrate how you can avoid overdramatic interpretations of the information about a situation.

Show and debate your role play in plenum.

Introduction text

Factfulness is a relaxing habit for critical thinking. It helps you maintain a fact-based worldview. It teaches you how to recognize and avoid the most common ways information gets misinterpreted.

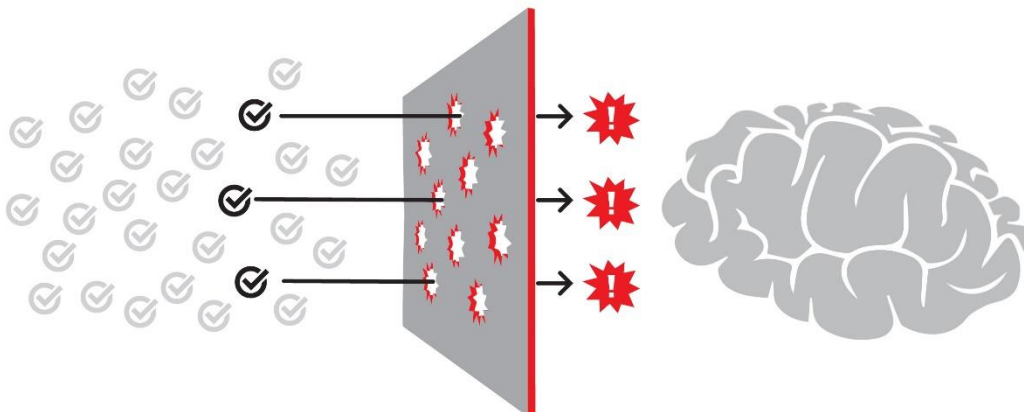
First: Realize that we don't see the world as it is.

Part one is to accept that humans do not see reality just as it is. There is too much information for us to process it all. That is why we all have an attention filter in our heads. However, this attention filter is hardwired to make us care more about dramatic information, which easily leads to a stressful over-dramatic impression of the world.

The dramatic attention filter

Factfulness starts by realizing that we don't see reality as it is.
We all have a built in attention filter protecting us against information overload.
But the filter is highly selective and we end up processing
mainly dramatic information.

From everything that happens the attention filter selects the most dramatic.



makes the world look
more dramatic than it is

www.gapminder.org/factfulness

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Second: Recognize what types of stories trigger our dramatic instincts

Next, you need to learn to recognize the common types of stories that trigger your dramatic instincts. This will help you control your intake of drama. Most people need to think twice to control their intake of sugar and fat – and it seems to be the same with drama. Here is the list of dramatic instincts and, below this list, we have listed the concrete rules of thumb that can help you avoid overdramatic interpretations.

FACTFULNESS POSTER

Dramatic Instincts

1 The gap instinct



Look at the gap!

2 The Negativity Instinct



It's getting worse!

3 The Straight Line Instinct



It just continues!

4 The Fear Instinct



It's scary!

5 The Size Instinct



It's big!

6 The Generalization Instinct



They are all the same!

7 The Destiny Instinct



It never changes!

8 The Single Perspective Instinct



This is the solution!

9 The Blame Instinct



That's the bad guy!

10 The Urgency Instinct



It's now or never!

FACTFULNESS POSTER

Rules of Thumb

- 1 TO CONTROL THE GAP INSTINCT
Locate the majority



Is there really a gap?

- 2 TO CONTROL THE NEGATIVITY INSTINCT
Expect negative news



Would improvement get attention?

- 3 TO CONTROL THE STRAIGHT LINE INSTINCT
Imagine bending lines



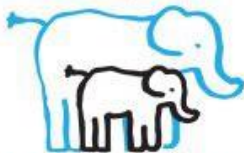
Why would this line not bend?

- 4 TO CONTROL THE FEAR INSTINCT
Calculate the risk



Is it really dangerous?

- 5 TO CONTROL THE SIZE INSTINCT
Check the proportions



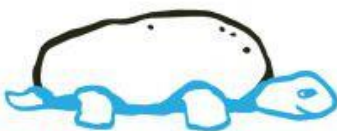
Is it big in comparison?

- 6 TO CONTROL THE GENERALIZATION INSTINCT
Question your categories



How are they different?

- 7 TO CONTROL THE DESTINY INSTINCT
Notice slow changes



Isn't it always changing slowly?

- 8 TO CONTROL THE SINGLE PERSPECTIVE INSTINCT
Use multiple tools



What other solutions exist?

- 9 TO CONTROL THE BLAME INSTINCT
Resist pointing finger



What system made this possible?

- 10 TO CONTROL THE URGENCY INSTINCT
Take small steps



Can we make decisions as we go?