

# The World in 2050




Can you imagine our world in 2050? By mid-century there will likely be 9 billion people on the planet, consuming ever more resources and leading ever more technologically complex lives. What will our cities be like? How will we eat in the future of Earth? Will global warming trigger catastrophic changes, or will we be able to engineer our way out of the world climate crisis?

**Task:** You will watch the BBC documentary «The World in 2050». Please read all the multiple-choice questions carefully and ask your teacher about words you do not understand. Then solve the questions while watching.

Source: [https://youtu.be/g\\_1oiJqE3OI](https://youtu.be/g_1oiJqE3OI)

## Fueling the Future

1. How big will the world's population be in 2050?
  - 8 billion.
  - 9 billion.
  - 10 billion.
2. What will the number of cars be like in 2050?
  - It will still be the same.
  - It will have doubled.
  - It will have tripled.

3. In Brazil, fuel is produced from which plant?
    - Sugar cane.
    - Strawberries.
    - Daisies.
  
  4. Against what is the race to develop new kinds of fuels?
    - Against other countries.
    - Against the earth.
    - Against time.
  
  5. What is the biggest challenge for fuel providers and car manufacturers?
    - To reduce CO<sub>2</sub> emissions.
    - To build faster cars.
    - To find more oil.
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6. From which disease – about which they talk – approx. one million people die per year?
    - Aids.
    - Malaria.
    - Dengue fever.
  
  7. What do they use to produce a drug against the disease mentioned above?
    - Sugar cane.
    - CO<sub>2</sub>.
    - Yeast.
  
  8. Imagining that glucose is the new petroleum, which plant is particularly interesting?
    - The switchgrass.
    - The rose.
    - The oak.
  
  9. What do synthetic biologists do?
    - They let plants do something they would not normally do.
    - They mix together different plants.
    - They observe animals and plants.

10. What do materials chemists do?

- They let plants do something they would not normally do.
- They want to do artificial photosynthesis.
- They mix together different materials like iron, wood, and biomaterial.

11. Within what time span do they want to have the first artificial photosynthesis solar fuels generator?

- Within ten years.
- Within five years.
- Within two years.

12. What will help people to get to a place more efficiently in the future?

- 2D maps.
- 3D maps.
- 4D maps.

### Driven by Design

13. How many hours does the average American spend in the car per year?

- 200 hours.
- 300 hours.
- 400 hours.

14. How could you increase the utilization of the road network?

- By building more train rails.
- If more people worked from home.
- By having cars that could drive more closely.

15. LIDAR, sonar, 360-degrees video – these are all components of what?

- A director's equipment.
- A dolphin's orientation system.
- "Digital Mapping".

16. What is another point to improving transport efficiency?

- Building cars that drive themselves.
- Building smaller cars.
- Building cars that do not need any fuel.

17. One next-generation vehicle is being built right now – by which company?

- Suzuki.
- BMW.
- Scania.



18. How many items of information per minute are drivers exposed to?

- 13 items of information.
- 130 items of information.
- 1'300 items of information.

19. Why is less fuel needed if heavy-duty vehicles drive more closely?

- Because drivers have to be more attentive.
- Because there is less air resistance.
- Because drivers do not lose orientation.

20. If one of these future vehicles wanted to brake in front of the others, what would happen?

- There would be an enormous crash.
- It would send a message to the other vehicles and they would also brake.
- It could not brake – the brakes would be blocked.



## Searching for Utopia

21. Which city will be the city of the future and the role model of the world?

- Masdar.
- Dubai.
- Muscat.

22. What is this city going to be like?

- Carbon-neutral, pedestrian-friendly, and powered by renewable energies.
- It is going to look exactly like New York.
- It is going to be the first car-free city.

23. Where can transportation be found in this city?

- On the streets.
- Underneath the city.
- In the air.

24. Where are many design elements of this city adapted from?

- Egyptian pyramids.
- Medieval European cities.
- Ancient Arabic towns and villages.

25. What should not be directly hit by the sun?

- The cars.
- The street.
- Glass.

26. By how many percent are air-conditioning needs cut by simple design moves in the city of the future?

- 60%.
- 70%.
- 75%.

27. What do the roofs NOT do?

- They provide shade.
- They collect the rain water.
- They provide electricity.



28. What is the reason so many cities were built in the desert?

- There was oil, so there was money.
- People like the warm climate there.
- Since the population grew, new cities had to be built.

29. From which prototype does the city hope to get energy in the future?

- Wind generators.
- Silicon panels.
- Solar Beam Down.

30. What does this prototype generate to run turbines?

- Water.
- Steam.
- Wind.

31. The city should not be an ideal city, but...?

- ...a laboratory that develops things for other cities.
- ...an amusement park.
- ...a city of the past.

32. Which cities are built around cars?

- Paris or Singapore.
- London or New York.
- Los Angeles or Houston.



**Task:** Build groups of three or four people. Search together for ideas about how the year 2050 will look like and what things will exist then. Then create a poster that presents your ideas. You can both draw on information from the documentary and on your own knowledge or imagination. You will later present your poster to the class.

### Anhang: Bildnachweise / Lizenzen

Die in diesem Unterrichtsmaterial-Dossier verwendeten Bilder stammen von folgenden Quellen:

- Seite 1, Titelbild, Pixabay
- Seite 2, Auto, Pixabay
- Seite 4, Autobahn, Pixabay
- Seite 4, Auspuff, Pixabay
- Seite 6, Wüstenlandschaft, Pixabay
- Seite 6, Wolkenkratzer, Pixabay