

How much electricity does it take to power the world?

1. Choose the correct answer or write it whenever necessary.

- How much electricity does it take to power the world, as of 2020?
 - 6.3 billion
 - 3 trillion
 - 20 billion
 - 540 million
- Around the world, there are _____ people who don't have access to reliable electricity.
 - 2 Billion
 - 1 Billion
 - 500 Million
 - 10 Million
- Demand for electricity is expected to increase about 80 percent by
 - 2030
 - 2040
 - 2050
 - 2100
- Our need for electricity is expected to increase due to:
 - Rising global populations
 - Our increased reliance on batteries
 - Electrifying industries that rely on fossil fuels
 - A & C
 - All the above
- True or false: nuclear fission produces less radioactive waste than nuclear fusion
 - True
 - False
- How can electricity help reduce global greenhouse gas emissions?
- What are the setbacks of using wind and solar power, and how can we resolve them?
- Explain difference between both nuclear fusion and nuclear fission.

2. Match 1-10 to a-j to form some verb + noun collocations that are used in the video:

- | | |
|--------------|-------------------------------|
| 1. Activate | a) a button |
| 2. Burn | b) a device / a place |
| 3. Eliminate | c) a generator |
| 4. Flip | d) a switch |
| 5. Join | e) a turbine |
| 6. Measure | f) electricity |
| 7. Power | g) electrons (through a wire) |
| 8. Press | h) emissions |
| 9. Push | i) fossil fuels |
| 10. Spin | j) the grid |

KEY

1.

1. B
2. B
3. C
4. D
5. B
6. Switching from fossil fuels to electric power. (e.g. electrifying cars, switching buildings heated by natural gas furnaces to electric heat pumps, etc.)
7. We can't store and ship sunlight or wind the way we can transport oil. We'd have to store that energy in batteries and improve our power grid infrastructure to transport it long distances.
8. Accidents aren't a concern with nuclear fusion and it doesn't produce the long-lived radioactive waste fission does.

2.

1. c
2. i
3. h
4. d
5. j
6. f
7. b
8. a
9. g
10. e