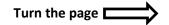


Hello, I am a Robot Scientist in the University of Bath. But someone has erased my memory! Can you help me to remember my work?

| | | | Gender | Prefer not to say | | | |
|--|--|--------------------|-------------------------------|----------------------|--|--|--|
| 1. Which of these colours of light are in the right order? | | | | | | | |
| Α | Red, Cyan, Green, Blue, Yellow, Orange | В | Red, Orange, Yellow, G | | | | |
| С | Blue, Yellow, Green, Cyan, Red, Orange | D | Orange, Blue, Red, Gre | • | | | |
| 2. Which ones are primary colours of light? | | | | ☐ I don't know yet. | | | |
| Α | Pink, Mauve, Black | В | Red, Green, Blue | | | | |
| С | Orange, Yellow, White | D | Purple, Cyan, Brown | | | | |
| 3. If | you add red, green and blue light together, w | colour do you get? | ☐ I don't know yet. | | | | |
| Α | Yellow | В | Orange | | | | |
| С | Black | D | White | | | | |
| 4. V | Vhat is light made of? | | | ☐ I don't know yet. | | | |
| Α | Air | В | Photons | | | | |
| С | Gluons | D | Molecules | | | | |
| 5. Can you mix red light and red light to get blue light | | | ? | ☐ I don't know yet. | | | |
| Α | Never | В | Yes, it happens all the | time | | | |
| С | Yes but only if you use a lot of red laser light | D | Yes, but only if you use | blue paint | | | |
| 6. A | lens does which of the following? | | | ☐ I don't know yet. | | | |
| Α | Changes the direction of light | В | Makes an object appear larger | | | | |
| С | Makes an object appear smaller | D | All of the above | | | | |
| 7. V | Which of these is actually wrong about laser lig | ht? | | ☐ I don't know yet. | | | |
| Α | It has very little spread | В | It is made of different t | things than sunlight | | | |
| С | It is all precisely the same colour | D | It travels in a straight li | ne | | | |
| 8. T | he colours in a rainbow are ordered because | | | ☐ I don't know yet. | | | |
| Α | they can smoothly go from one to another. | В | they are complementa | ry. | | | |
| С | light in each colour vibrates differently. | D | they travel at different | speed in space. | | | |
| 9. V | Vhat do we use metamaterials for? | | | ☐ I don't know yet. | | | |
| Α | To trick light into doing unusual things | В | To 3D print objects wit | h laser light | | | |
| С | To make materials stronger | D | For new car engines, d | riven by laser light | | | |
| 10. | Scientists who work with light use? | | | ☐ I don't know yet. | | | |
| Α | screwdrivers | В | objects made of glass: | mirrors, lenses | | | |
| C | metal rods | D | All of the above | | | | |





Just a few more questions and I will be OK!

| 11. What is the colour of the Sun? | | | ☐ I don't know yet | |
|--|--|--------|---|---------|
| A C | White Red | B D | Yellow Orange | |
| 12. | Which one IS true about humans? | | ☐ I don't kn | ow yet. |
| Α | We can see colours such as they really are. | В | Everyone can fail to recognize a colour | r. |
| С | Only some people don't recognize colours. | D | Only red and green are hard to recogn | iize. |
| 13. | What do we call "chiral objects"? | | ☐ I don't kn | ow yet. |
| Α | Those that look the same in a mirror. | В | Those that cannot be seen in a mirror. | |
| С | Those that look different in a mirror. | D | Those from which mirrors are made. | |
| 14. | What is a "metamaterial"? | | ☐ I don't kn | ow yet. |
| Α | A material with human-made, "fake" atoms | В | A material with super heavy atoms | |
| С | A material with super small atoms | D | A material with all the same atoms | |
| 15. | The colours of light are like what in music? | | ☐ I don't kno | ow yet. |
| Α | rhythm | В | volume | |
| С | notes | D | silence | |
| 16. How many colours does a modern smart phone | | ie di | lisplay? □ I don't kn | ow yet. |
| Α | 2 | В | 256 | |
| С | 3 | D | 64000 | |
| 17. How many types of crystals are there in Nature | | | ☐ I don't kn | ow yet. |
| Α | 14 | В | 918 | |
| С | 256 | D | More than 1000 | |
| 18. | A cubic crystal is what? | | ☐ I don't kn | ow yet. |
| Α | see through. | В | always precious. | |
| С | made of cubic atoms. | D | made of atoms arranged in cubes. | |
| 19. | How can we make light? | | ☐ I don't kn | ow yet. |
| Α | Using only a wire and a battery | В | Using a wire, a bulb and a battery | |
| _C | Using only a bulb and a battery | D | All of the above | |
| _ | Which one is true? | | | |
| Δ | I could be a scientist if I wanted to | R | I could never be a scientist | |