

KS1 D and T Quiz - Materials (Questions)

This quiz addresses part of the requirements of the National Curriculum KS1 Design and Technology for children aged 5 and 6 in years 1 and 2. Specifically it looks at different materials and their uses, and also how structures are made stronger. It is one of 10 quizzes to help you with designing and making useful things, and finding out about how things are made.

What are things made from? Why are a lot of houses built with bricks? Why are most shoes made from plastic and leather? Why are car engines made from metal? This quiz looks at different types of materials and their uses. It also looks at how buildings and other structures are made stronger.

<p>1. Which one of these materials might be used to build a real bridge?</p> <p><input type="checkbox"/> Plastic</p> <p><input type="checkbox"/> Cardboard</p> <p><input type="checkbox"/> Clay</p> <p><input type="checkbox"/> Stone</p>	<p>2. Why are stone, concrete or metal used to build bridges?</p> <p><input type="checkbox"/> Because they are cheap</p> <p><input type="checkbox"/> Because they are expensive</p> <p><input type="checkbox"/> Because they are bendy</p> <p><input type="checkbox"/> Because they are strong</p>
<p>3. Tom's Dad is building a rabbit hutch. What material does he use to build the hutch?</p> <p><input type="checkbox"/> Wood</p> <p><input type="checkbox"/> Cardboard</p> <p><input type="checkbox"/> Cloth</p> <p><input type="checkbox"/> Paper</p>	<p>4. Katie and Ella are building model towers with card. Ella puts lots of folds into her card. Why does she do this?</p> <p><input type="checkbox"/> To make it stronger</p> <p><input type="checkbox"/> To make it weaker</p> <p><input type="checkbox"/> To make it go further</p> <p><input type="checkbox"/> Just for fun</p>
<p>5. Harry's Dad is an engineer. He is helping to build a tall wall from concrete. He puts metal rods into the concrete. Why does he add metal rods to the concrete?</p> <p><input type="checkbox"/> To make the wall weaker</p> <p><input type="checkbox"/> To make the wall lighter</p> <p><input type="checkbox"/> To make the wall bendy</p> <p><input type="checkbox"/> To make the wall stronger</p>	<p>6. Jack's shoes fasten with a Velcro strap. The Velcro has lots of tiny hooks. The Velcro makes a ripping noise when Jack pulls the strap open. Why is Velcro such a handy material for this job?</p> <p><input type="checkbox"/> Because it makes a funny sound</p> <p><input type="checkbox"/> Because it does not have to be tied like laces</p> <p><input type="checkbox"/> Because it has a funny name</p> <p><input type="checkbox"/> Because it is very expensive</p>
<p>7. A spider's web is very light but surprisingly strong. What helps to make it strong?</p> <p><input type="checkbox"/> There are lots of threads joined together</p> <p><input type="checkbox"/> It is made of metal</p> <p><input type="checkbox"/> It is glued together with super-glue</p> <p><input type="checkbox"/> It is man-made</p>	<p>8. There are railings outside Sam's school. The railings are made of iron. The caretaker is painting the railings. Why is the caretaker painting the railings?</p> <p><input type="checkbox"/> For something to do</p> <p><input type="checkbox"/> To stop the iron rusting</p> <p><input type="checkbox"/> To make them look nice</p> <p><input type="checkbox"/> To make them stronger</p>
<p>9. Harriet is designing a blanket for a baby. Harriet decides to make the blanket from wool. Why does Harriet choose to use wool?</p> <p><input type="checkbox"/> Because it is very heavy</p> <p><input type="checkbox"/> Because wool will keep the baby cool</p> <p><input type="checkbox"/> Because it is very expensive</p> <p><input type="checkbox"/> Because wool is good at keeping the baby warm</p>	<p>10. Sunil is designing a greenhouse. Plants will grow in the greenhouse. Sunil chooses to use glass for the windows of the greenhouse. Why does Sunil choose glass?</p> <p><input type="checkbox"/> Because glass is transparent</p> <p><input type="checkbox"/> Because glass never breaks</p> <p><input type="checkbox"/> Because glass is very expensive</p> <p><input type="checkbox"/> Because glass is bendy</p>

KS1 D and T Quiz - Materials (Answers)

1. Which one of these materials might be used to build a real bridge?

- Plastic
- Cardboard
- Clay
- Stone

What else can be used to build bridges? - Metal and concrete

2. Why are stone, concrete or metal used to build bridges?

- Because they are cheap
- Because they are expensive
- Because they are bendy
- Because they are strong

What are bridges used to cross?

3. Tom's Dad is building a rabbit hutch. What material does he use to build the hutch?

- Wood
- Cardboard
- Cloth
- Paper

How will Tom's Dad join the pieces of wood together?

4. Katie and Ella are building model towers with card. Ella puts lots of folds into her card. Why does she do this?

- To make it stronger
- To make it weaker
- To make it go further
- Just for fun

Round tubes are also stronger

5. Harry's Dad is an engineer. He is helping to build a tall wall from concrete. He puts metal rods into the concrete. Why does he add metal rods to the concrete?

- To make the wall weaker
- To make the wall lighter
- To make the wall bendy
- To make the wall stronger

This is called reinforced concrete

6. Jack's shoes fasten with a Velcro strap. The Velcro has lots of tiny hooks. The Velcro makes a ripping noise when Jack pulls the strap open. Why is Velcro such a handy material for this job?

- Because it makes a funny sound
- Because it does not have to be tied like laces
- Because it has a funny name
- Because it is very expensive

Do you have laces on any of your shoes? Are you good at tying laces?

7. A spider's web is very light but surprisingly strong. What helps to make it strong?

- There are lots of threads joined together
- It is made of metal
- It is glued together with super-glue
- It is man-made

Why do spiders make webs?

8. There are railings outside Sam's school. The railings are made of iron. The caretaker is painting the railings. Why is the caretaker painting the railings?

- For something to do
- To stop the iron rusting
- To make them look nice
- To make them stronger

Painting the railings does make them look nice, but the main job of the paint is to stop the railings rusting

9. Harriet is designing a blanket for a baby. Harriet decides to make the blanket from wool. Why does Harriet choose to use wool?

- Because it is very heavy
- Because wool will keep the baby cool
- Because it is very expensive
- Because wool is good at keeping the baby warm

Wool is a good insulator - it keeps the heat in

10. Sunil is designing a greenhouse. Plants will grow in the greenhouse. Sunil chooses to use glass for the windows of the greenhouse. Why does Sunil choose glass?

- Because glass is transparent
- Because glass never breaks
- Because glass is very expensive
- Because glass is bendy

Glass is transparent - it will let the sunlight through