

KS1 Science Quiz - Materials - Testing the Properties (Questions)

This quiz addresses the requirements of the National Curriculum KS1 Science for children aged 5 and 6 in years 1 and 2. Specifically this quiz is aimed at the section dealing with testing the properties of materials.

At school you have looked at different materials. You have done simple tests on materials. Things we can test, like strength or stretchiness, are called properties. How can you test which material is the strongest or which material is the stretchiest? Can you plan how to test different materials? In this quiz, you are asked about the best ways to test the properties of different materials.

1. Anna has a bag of flour and a bag of feathers. She does a test to decide which is the softest. She asks ten people to put their hands into the bags and say which is softest. Here are her results:

7 people say the feathers are softest. 2 people say the flour is softest. 1 person says they are both as soft as each other.

What has Anna found out?



- Flour is softer than feathers
- Feathers are probably softer than flour
- Flour and feathers are both as soft as each other
- Feathers are soft

2. Sarah has six glass bottles. They are all different colours. Sarah wants to know which glass bottle is most transparent. What can she do?



- Shine a torch through each one and see which is brightest
- Shine a torch through each one and see which is duller
- Tip the bottles upside down
- Roll the bottles along the floor

3. Freddie has two bottles of tomato sauce. He wants to know which one is the runniest. How can he test them to find out?



- Shake both the bottles
- Squeeze both the bottles
- Turn both the bottles upside down at the same time and see which one comes out quickest
- Turn both bottles upside down and shake them

4. Adam wants to find the stretchiest material.

Adam has a piece of string, a piece of wool, a piece of cotton, and a rubber band. They are all 10 cm long.

Adam ties a 50 gram weight to each one.

What must Adam measure to find out which one is stretchiest?



- Measure the length before and after adding the weight
- Only measure the length before adding the weight
- Measure how heavy the weight is
- Measure the temperature

5. Tom has some straws. One is made of plastic. One is made of paper. One is made of waxed card. One is made of rubber. Tom wants to know which material is the bendiest. How can Tom test to see which one is the bendiest?



- Drink through each straw in turn
- See how far each straw will twist round a beaker
- Pull hard on each straw
- Squash the straws with weights

6. Ali has a piece of paper and a piece of card. She wants to know which is the shiniest. How can she test to see which is the shiniest?



- Look at them in the dark
- Shine a torch on them and see which one reflects the most light
- Try cutting them with scissors
- Try stretching them

7. Ella's mum and dad have a plastic bag, a cardboard bag, a paper bag, and a leather bag. How can Ella test to see which is the strongest bag?



- Pour water into each bag
- Put weights into each bag
- Look at the bags with a magnifying glass
- Jump up and down on the bags

8. Toni has four blocks of wood. The four blocks of wood are all the same size and weight. Some are smooth and some are rough. How can Toni find out which block of wood is the smoothest?



- Pull them along the ground with a piece of string
- Drop them all from a table onto the floor
- Put them on a slide and see which one goes furthest
- Put them on a slide and see which one does not move

9. Anna has a bag of flour and a bag of feathers. She wants to check which is the softest. What should she do?

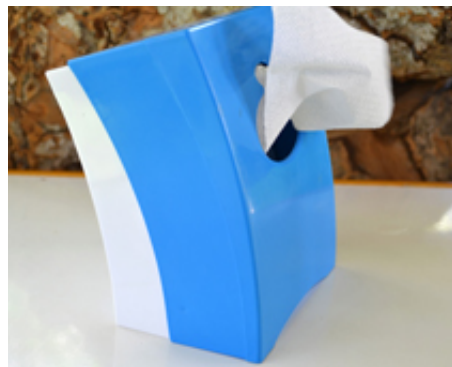


- Put her hand into the bags and say which one is softest.
- Ask two people to put their hands into the bags and say which is softest.
- Ask ten people to put their hands into the bags and say which is softest.
- Ask ten people to look into the bags and say which is softest.

10. Grace has two boxes of tissues. Grace wants to know which tissue is best.

She takes one tissue from each box. She puts them in saucers. Then she pours a teaspoon of water on each tissue.

How does Grace know which tissue is best?



- The best tissue soaks up only a little bit of water
- The best tissue soaks up no water
- The best tissue soaks up the most water
- The best tissue soaks up hardly any water

KS1 Science Quiz - Materials - Testing the Properties (Answers)

1. Anna has a bag of flour and a bag of feathers. She does a test to decide which is the softest. She asks ten people to put their hands into the bags and say which is softest. Here are her results:

7 people say the feathers are softest. 2 people say the flour is softest. 1 person says they are both as soft as each other.

What has Anna found out?



- Flour is softer than feathers
- Feathers are probably softer than flour
- Flour and feathers are both as soft as each other
- Feathers are soft

That was a hard question!

3. Freddie has two bottles of tomato sauce. He wants to know which one is the runniest. How can he test them to find out?



- Shake both the bottles
- Squeeze both the bottles
- Turn both the bottles upside down at the same time and see which one comes out quickest
- Turn both bottles upside down and shake them

This could be a messy experiment!

2. Sarah has six glass bottles. They are all different colours. Sarah wants to know which glass bottle is most transparent. What can she do?



- Shine a torch through each one and see which is brightest
- Shine a torch through each one and see which is duller
- Tip the bottles upside down
- Roll the bottles along the floor

Don't forget, you can see through a transparent material

4. Adam wants to find the stretchiest material.

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Adam has a piece of string, a piece of wool, a piece of cotton, and a rubber band. They are all 10 cm long.

Adam ties a 50 gram weight to each one.

What must Adam measure to find out which one is stretchiest?



- Measure the length before and after adding the weight
- Only measure the length before adding the weight
- Measure how heavy the weight is
- Measure the temperature

Which one of the four materials do you think will be the stretchiest?

5. Tom has some straws. One is made of plastic. One is made of paper. One is made of waxed card. One is made of rubber. Tom wants to know which material is the bendiest. How can Tom test to see which one is the bendiest?



- Drink through each straw in turn
- See how far each straw will twist round a beaker
- Pull hard on each straw
- Squash the straws with weights

The bendiest straw is the most flexible straw

7. Ella's mum and dad have a plastic bag, a cardboard bag, a paper bag, and a leather bag. How can Ella test to see which is the strongest bag?



- Pour water into each bag
- Put weights into each bag
- Look at the bags with a magnifying glass
- Jump up and down on the bags

Which one of the four bags do you think will be the strongest? Which do you think will be the weakest?

6. Ali has a piece of paper and a piece of card. She wants to know which is the shiniest. How can she test to see which is the shiniest?



- Look at them in the dark
- Shine a torch on them and see which one reflects the most light
- Try cutting them with scissors
- Try stretching them

Mirrors are very shiny

8. Toni has four blocks of wood. The four blocks of wood are all the same size and weight. Some are smooth and some are rough. How can Toni find out which block of wood is the smoothest?



- Pull them along the ground with a piece of string
- Drop them all from a table onto the floor
- Put them on a slide and see which one goes furthest
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How can you make a piece of wood smoother?

9. Anna has a bag of flour and a bag of feathers. She wants to check which is the softest. What should she do?



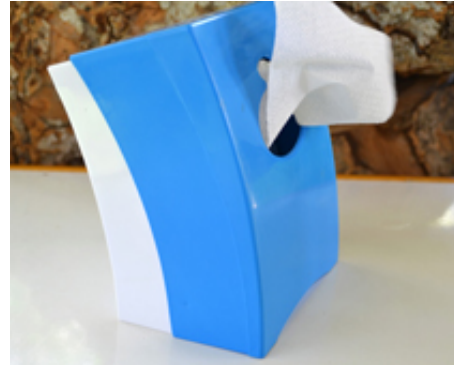
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- Ask two people to put their hands into the bags and say which is softest.
- Ask ten people to put their hands into the bags and say which is softest.
- Ask ten people to look into the bags and say which is softest.

In this test, ask as many people as possible

10. Grace has two boxes of tissues. Grace wants to know which tissue is best.

She takes one tissue from each box. She puts them in saucers. Then she pours a teaspoon of water on each tissue.

How does Grace know which tissue is best?



- The best tissue soaks up only a little bit of water
- The best tissue soaks up no water
- The best tissue soaks up the most water
- The best tissue soaks up hardly any water

The best tissue is the most absorbent