

# Hardness

You are going to investigate the hardness of different materials. Hardness means how firm an object is, and how easily it is cut or scratched.

You will need to scratch each material using a coin and / or a screw and measure how easy it was to scratch. You might give it a score, which you can use later to compare the hardness of each object.

If you can think of a better method of testing the hardness of the objects, share your idea with your group and choose the best method.

You will need to record your results in a graph or a table to make it easier to compare them.

# Strength

You are going to investigate the strength of different materials. Strength means how much an object resists being damaged or broken.

In your experiment, you will need to think of one way of damaging the different pieces of paper. You will then need to record how well each piece of paper coped when you damaged it.

For example, you might want to tear each piece, and record (by giving each piece of paper a score) how easy it was to tear.

You could also poke the paper with an object and see if a hole is made.

If you have another idea, share it with your group and decide which might be the best way of testing the strength.

Remember, you must work out some way of recording how easy or hard it was to damage the paper, so that we can compare results later.

# Flexibility

You are going to investigate the flexibility of different materials. Flexibility means how much the object will bend without breaking.

You will need to bend the object in some way and think of a way of recording how much each object bends, so that we can compare the results later.

You could try and bend the object around a pencil, or over the edge of the table. You could then give each object a score to show how easy or hard it was to bend.

If you can think of a better method of testing the flexibility of objects, share it with your group, and decide which method is best.

# Magnetism

You are going to investigate the magnetism of different objects. Magnetic objects are attracted to one another.

You will need to test which objects are magnetic, by placing them next to the magnet. You can then record your results in some way - you will need to decide what to record first.

If you can think of another way of testing if different materials are magnetic, tell it to your group, and together decide on the best method.

Remember, you must think of a way of recording your results, so that we can compare them later.