

Inheritance

Starter

- Begin by explaining that we get some of our characteristics from our parents such as hair colour, skin colour and our height. Talk with a partner about anything else that they might inherit from a parent?
- Do you think that animals and plants also inherit characteristics from their parents?
- Explain that they do and the way we inherit is our bodies have a set of instructions inside them called DNA and we get half from our mum and half from our dad. This special set of instructions tells our bodies how to grow, what colour hair and eye colour we should have as well as how tall we should be!
- Explain that today we are going to do a little experiment to see how plants inherit their flower colour.

Activity

- Working in pairs the children will have a selection of coloured counters for 2 colours. They should only need 6 of each colour. Start the experiment with two of one colour and two of another colour with the parent plants having both counters the same colour.
- Each pair will pick out two counters and mark the colours down on a piece of paper. The counters can then go back into the bag and another two counters are chosen. This gives the pair the next set of parent plants.
- If they chose the counters blue blue and orange orange they would now place two blue and two orange counters into their bag for the next round.
- This time they may chose blue blue and blue orange. They would mark these colours on the next line and then place three blue and one orange counter into their bag for the next round.

Plenary

- Have a look as a class at whether the parent's flower colour made a difference to the last flower colour of the parent's descendants.
- Can we relate this to people and eye colour? See if the children can talk with a partner and come up with an explanation to share with the class.
- Close by asking the class to speak to their partner again, this time to remind each other what DNA is. Ask a group to share with the class and see if others agree.

Extension idea

- Put a third colour into the experiment.
- What happens if a predator always eats a flower that is a certain colour?
- Have a go at growing some sweet peas and discuss what colours the parent plants might have been.