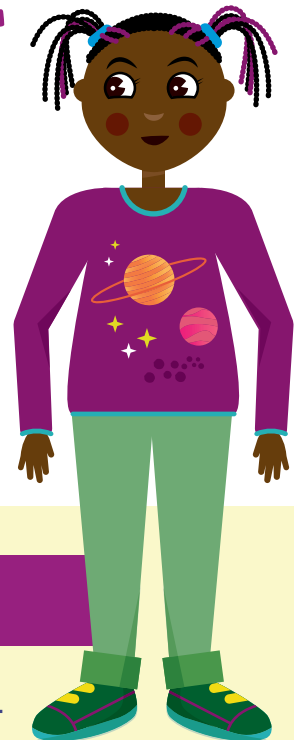




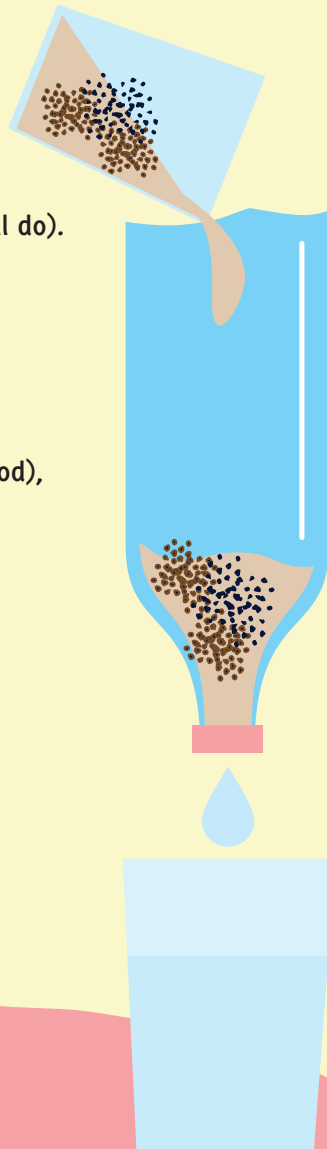
ASTRA'S EXPERIMENT



WATER FILTRATION

YOU'LL NEED THE FOLLOWING MATERIALS:

- A transparent bottle with a screw cork (any soda bottle will do).
- A large glass or bowl.
- A piece of cotton wool (or a paper coffee filter).
- Fine sand, abt. 3 dl
- Small stones, abt. 5 dl
- Charcoal (like that used to grill food), abt. 2 tbsp
- Water



IMPLEMENTING THE EXPERIMENT

- Carefully remove the bottom part of the bottle.
- Place the now funnel-like bottle upside-down into the glass.
- You need to ensure the bottle will stay upright by itself even when filled with water, so you'll probably have to support the structure to make it stable.
- Remove the cork and make a pencil-sized hole in it.
- Place a wad of cotton wool (or folded filter paper) into the cork.
- Screw the cork back on to the inverted bottle.
- Now place 2 TBSP of fine sand into the bottle.
- Then place 2 TBSP of finely ground coal on top of the sand.
- Now add more fine sand until the bottle is about $\frac{3}{4}$ full.
- Lastly, add the stones.
- Now, in a separate jug, thoroughly mix very fine sand into a jarful of water, so the water becomes cloudy and brown.
- Pour the water into the inverted bottle-filter. This may take some time and you'll have to top the bottle up several times as the water descends into the filter.
- Finally, when the filtered water starts draining into the glass, carefully observe what the water looks like!