

Activity Sheet 8 Vocabulary

solid

liquid

evaporate

sediment

mixture

mix

irreversible

reversible

opaque



clear

heat

measure

viscous

filter

extract

Activity Sheet 9: Instructions for extracting starch from a potato

You will need:

- Potato peel or old potatoes (about 100g)
- The foot from an old pair of tights or a pop sock
- A jug or bowl (it will need to hold about a litre of liquid)
- A food processor, blender or liquidiser
- Saucer or plate

1. An adult uses the food processor or blender to blitz the potatoes with about 500ml water until the potato is broken down very finely. Alternatively, you could grate them very finely. You should now have a 'slurry' of potato and water.
2. Pour this mixture into the foot of the tights. Hold over a jug or bowl and squeeze out as much liquid as possible. When no more liquid can be squeezed from the tights the potato solids can be disposed of (ideally on a compost heap).
3. The liquid that has been squeezed from the potato will be very cloudy. This is because the particles of starch that were in the potato are so fine that they were squeezed through the holes in the tights along with the water. The rest of the potato was made up of particles that were too big to fit through the holes so they were left behind in the tights. The method of separating materials is called **filtration**.
4. Leave the cloudy liquid to stand for between 10 and 15 minutes. You will notice that water gradually clears as the particles of starch sink to the bottom of the container. This is called **sedimentation**.
5. Once the potato starch has settled the water can be very slowly poured away. The wet potato starch can now be left in a flat container, such as a saucer, so that the rest of the water will be removed by evaporation. Putting the container in a warm place, such as an airing cupboard, above a radiator or on a warm windowsill, will speed up this stage which may take two to three days.

SAFETY GUIDANCE

Adult supervision will be needed when using a knife or grater.

Make sure that children understand the expectations for safe use.