

GLOVEBOX CHALLENGE

Astronauts on the International Space Station use the Microgravity Science Glovebox to carry out lots of experiments in a controlled environment.

The experiment is sealed inside the box and the astronauts use the attached gloves to pick up and work on the experiment without breaking the seal. This protects the experiment and the astronaut. It can be really tricky because you have to wear big gloves.

Make your own box and see if you could work this way.

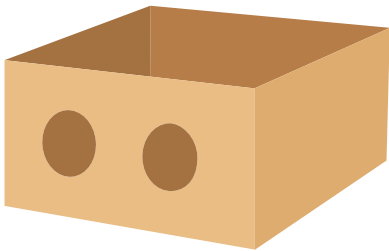
1)



YOU WILL NEED

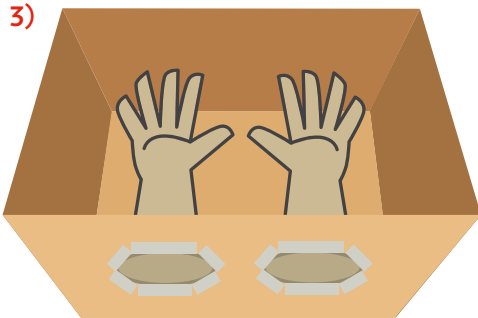
- Sturdy cardboard box
- Cling film or some transparent plastic from your recycling
- Rubber gloves
- Sticky tape
- Scissors

2)



1. Cut the top/flaps off the box
2. Cut two armholes in a long side of the box. Make sure that they are large enough for you to get your hands through easily but not too big that the ends of your gloves can't be attached
3. Put the rubber gloves through the holes, then tape the outside of the gloves to the edge of the holes. You need to be able to put the gloves on through the holes, so that you are wearing the gloves inside the box.
4. Cover the top of the box with cling film or plastic, so that you can't reach inside but can see. *(if you are using recycled plastic leave one side unattached so you can move objects in and out of the box easily.*

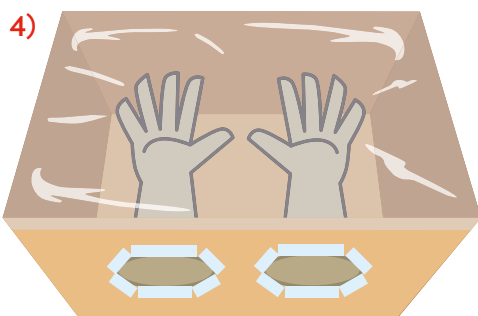
3)



CHALLENGE

1. Put 3 small cups and 3 balls inside the glove box.
2. Put your hands through the gloves and try to put all of the balls into the cups using only the gloves.

4)



Why not try other tasks in the box

- Stack and sort coloured blocks
- Build a building brick model
- Make a shape out of play dough
- Draw a picture

Share your attempts with us

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