Periscope

duration: 30 - 60 minutes
age: from 7 years

Look around corners with this simple periscope

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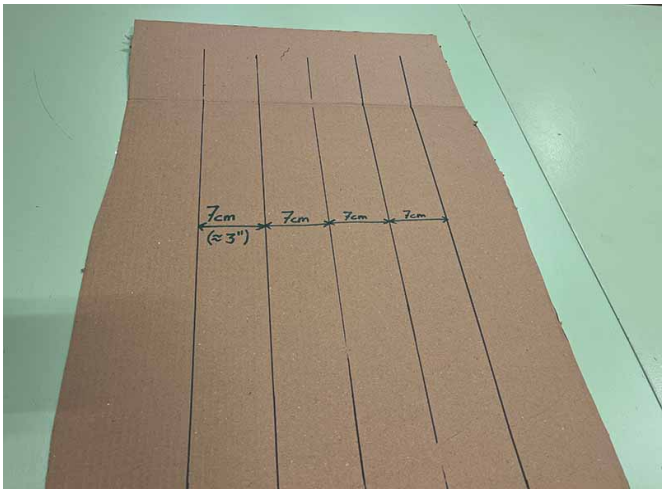
tools

- ☐ Hobby knife
- ☐ Cutting mat
- ☐ Ruler
- ☐ Marker

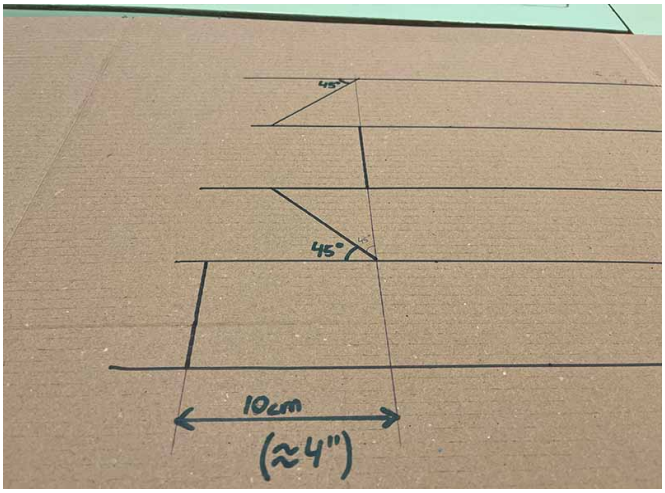
materials

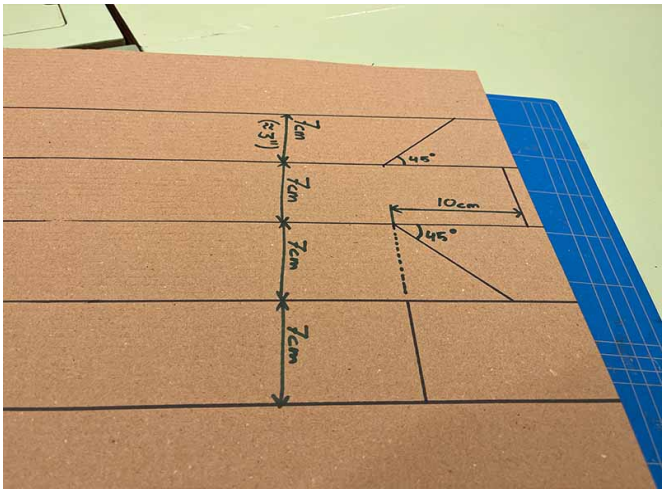
- ☐ Cardboard, at least 12 inch wide. The length is up to you.
- ☐ 2 mirrors, 3 by 4 inches
- ☐ tape
- ☐ glue



1 Start your drawing

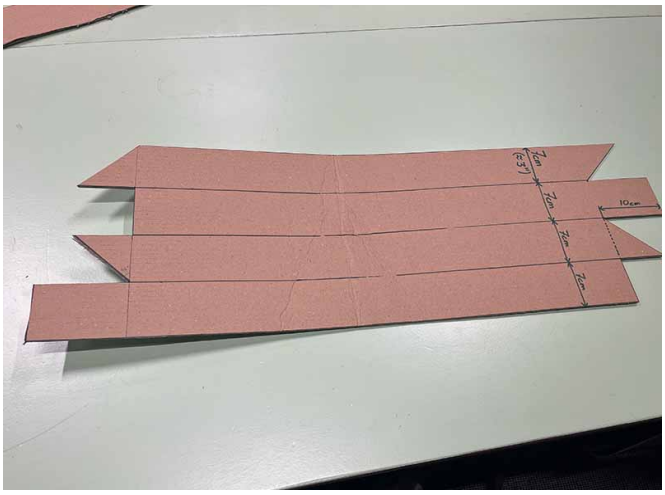
- Start by drawing 5 parallel lines on your cardboard, 3 inches apart. The length is up to you, that will determine how long your periscope will be





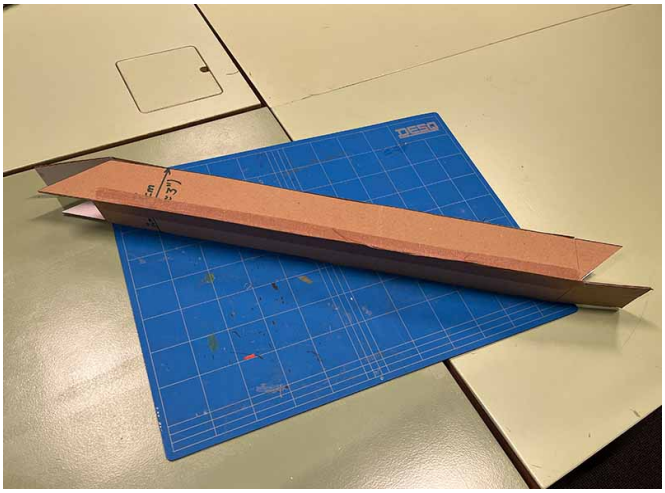
2 Draw the ends

- Use your protractor triangle to copy the ends from the photos. Be aware that the left and right end are not the same!



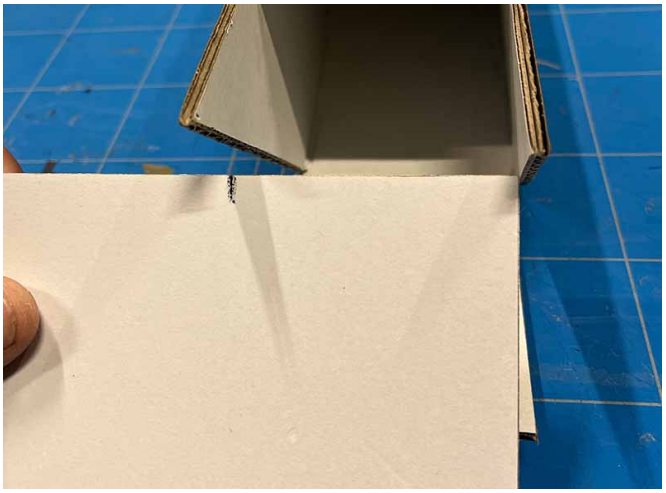
3 Cut the cardboard

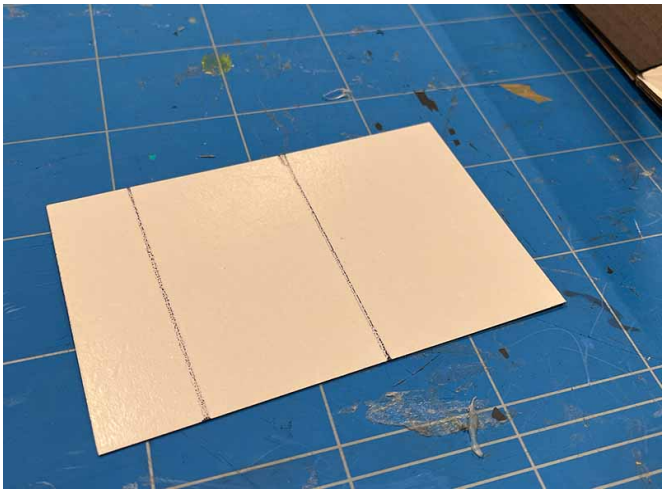
- Cut out the outer lines on the cardboard using your hobby knife. Make sure to use a cutting mat to protect the table.

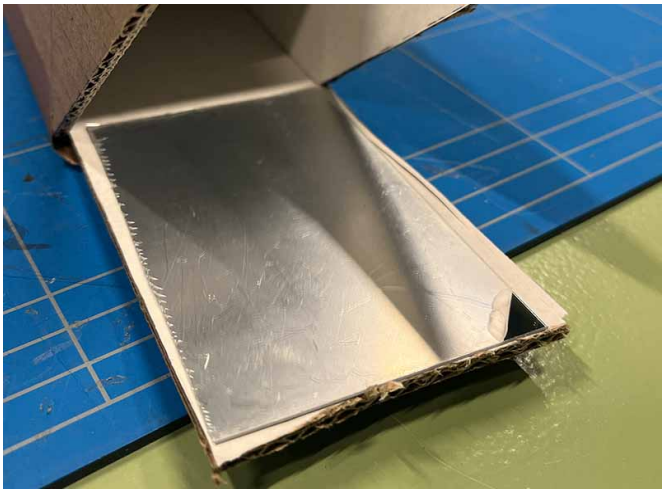


4 Score and fold

- Using the hobby knife partially cut the lines where you'll want to fold. This way you can fold the cardboard neatly.
- Use tape to stick the carboard together as a long square tube.



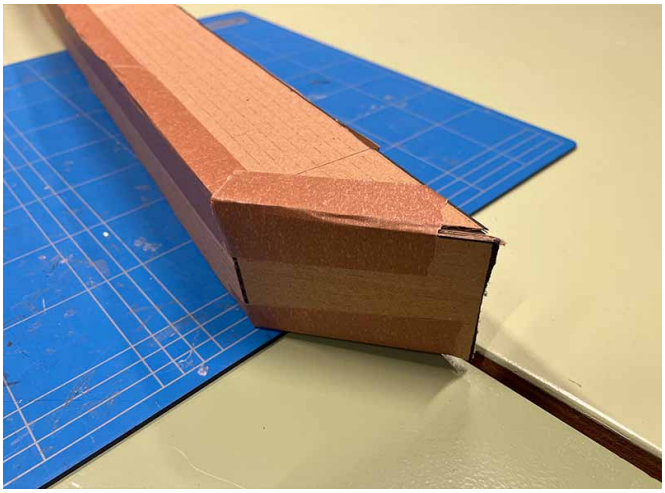




5 Add the mirrors

- A more rigid mirror will work best for this project as it stays nice and flat. If your mirror is very flexible, maybe try glueing it to a flat sheet of wood before attaching it to the cardboard.

- Mark the mirrors so you can fit them on the inside of the tube. Mark them on the non mirror side.
- Extend the mark you made to a full line.
- Use your hobby knife to score the mirrors back a few times. After that you should be able to snap it by hand.
- Use glue, or the self-adhesive backing of the mirror to glue it to the long bits of cardboard at the end.
- If your mirror has a protective foil layer, remove it now.



6 Finish up

- Use some more tape to fix the cardboard with the mirrors to the angled bit of cardboard.
- Make sure the mirrors end up at 45 degrees.

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7 You're done!

- Go test your periscope and see what is hidden on top of the cabinets at home.