Family science: Where is the Southern Cross?

Due: Wednesday 30th April

Make your own 'Star tracker'.

All you need is a coat hanger and a clear plastic sheet.
A tripod or solid platform to mount your tracker.

Go outside on a clear night. Find your directions. Don't forget to rug up if it's cold.
See if you can find this star constellation in the sky.

Don't be fooled the Southern Cross is not always in this position.

The constellation is called Crux. We call it the Southern Cross. A hint in finding it is in its name.

It's called the Southern Cross.
The two stars that look like they are pointing at it are referred to as 'The Pointers'.

Mark the position of the Southern Cross on your grid using white correction fluid.

Make a template of The Southern Cross using your star points marked on the grid.

Make your second observation two hours later.
Use the template to mark the new position of the Southern Cross.

Answer these questions in your homework book.

What did you observe?
Draw and describe what you observed.
Can you explain your observations?
In this experiment, why is it important to view the Southern Cross from exactly the same place and position?
Is your distance from the tracker important?
Parent Information Guide:

Where is the Southern Cross?

Dear Parent/Guardian,

What your child is learning in science at the moment
As part of a unit on the Earth, your child is learning about how the rotation of the Earth causes night and day.

The task
Locate the Southern Cross star constellation on a cloudless night. Track it after a couple of hours.

How you can help
Use a coat hanger to make a ‘Star tracker’.

Mark the position of the Southern Cross
Find a comfortable position on which to rest the ‘Star tracker’. Make sure that:
- the side of the ‘Star tracker’ rests against a fixed object
- this exact point and position is used for further observations
- you view the tracker from the same distance.

With their ‘Star tracker’ held steady, they use white correction fluid to mark the points of the Southern Cross on their grid. Return inside and make a template of the Southern Cross out of stiff card using the points marked on the grid.

Make another observation
Venture out a couple of hours later and relocate the Southern Cross. In the exact viewing position as before use the template to mark the new position of the Southern Cross. Compare the position of the Southern Cross observed on both occasions. Discuss your observations with your child. Ask your child where they think the position of the Southern Cross will be in another two hours. If possible you could make the final entry on the grid using a second template of the Southern Cross. Can they predict where it will be in 6 hours?