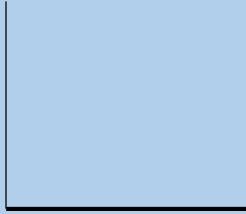


Hello again Year 5

We are going to continue our work on angles, but this time look at the skills needed to measure angles using a protractor.

LI: To recognise and measure angles

What is an angle?



An angle is the space between two intersecting (joining) lines, it is measured in degrees

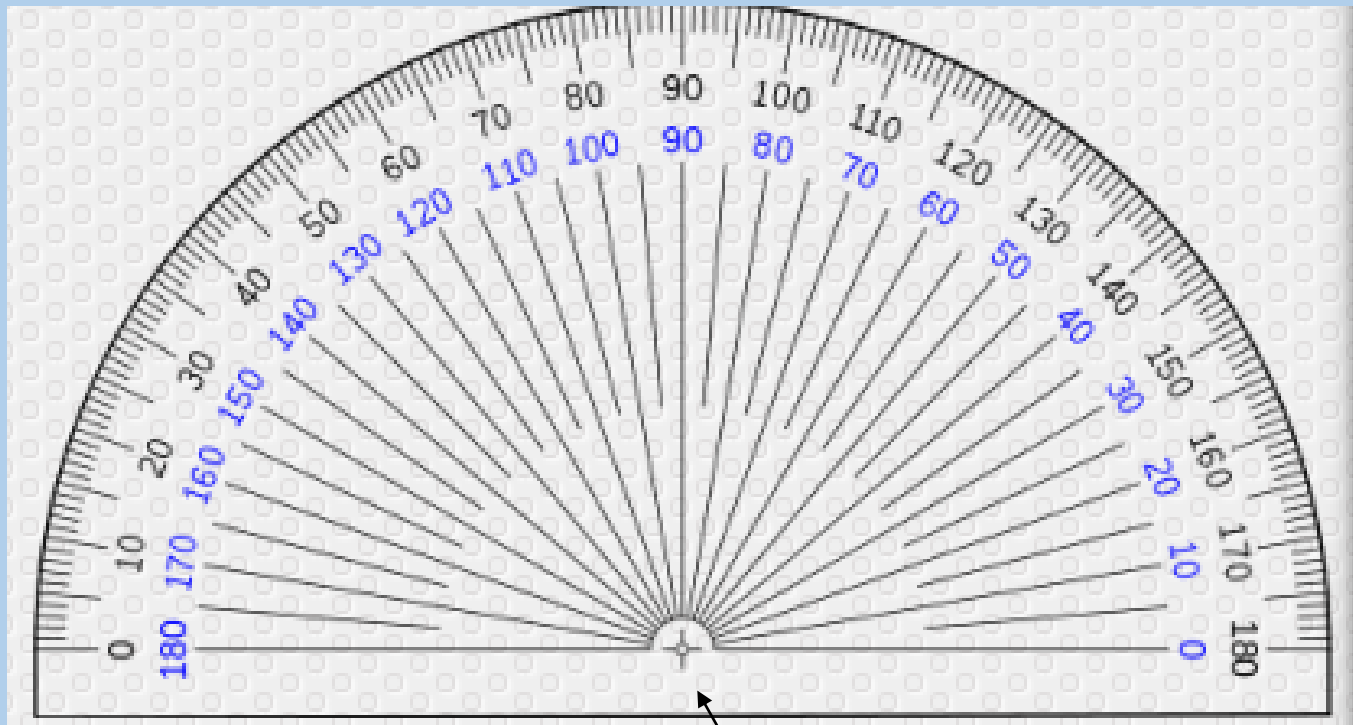
In geometry there are different types of angles,

- * **acute** an angle between 0 and 90 degrees,
- * **right-angle** a 90-degree angle,
- * **obtuse** an angle that falls between 90 and 180 degrees
- * **straight angle** one that is a line of 180 degrees.
- * **reflex angle** an angle greater than 180 degrees

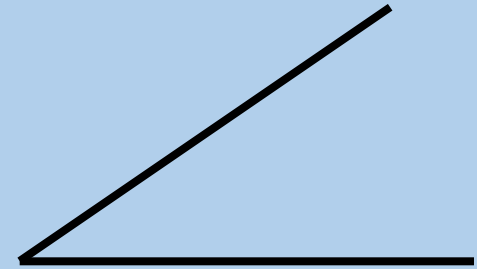
<https://www.bbc.co.uk/bitesize/topics/zb6tyrd/articles/zg68k7h>

We can measure angles using a protractor.

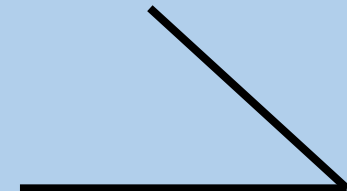
The protractor has two scales - which can sometimes lead to confusion when reading the angle measurement.



The point of your angle lines up with this cross and on the horizontal line Marked 0.



To measure this angle, you would read the blue scale.



To measure this angle, you would read the black scale.

https://www.transum.org/software/SW/Starter_of_the_day/Students/Measuring_Angles.asp

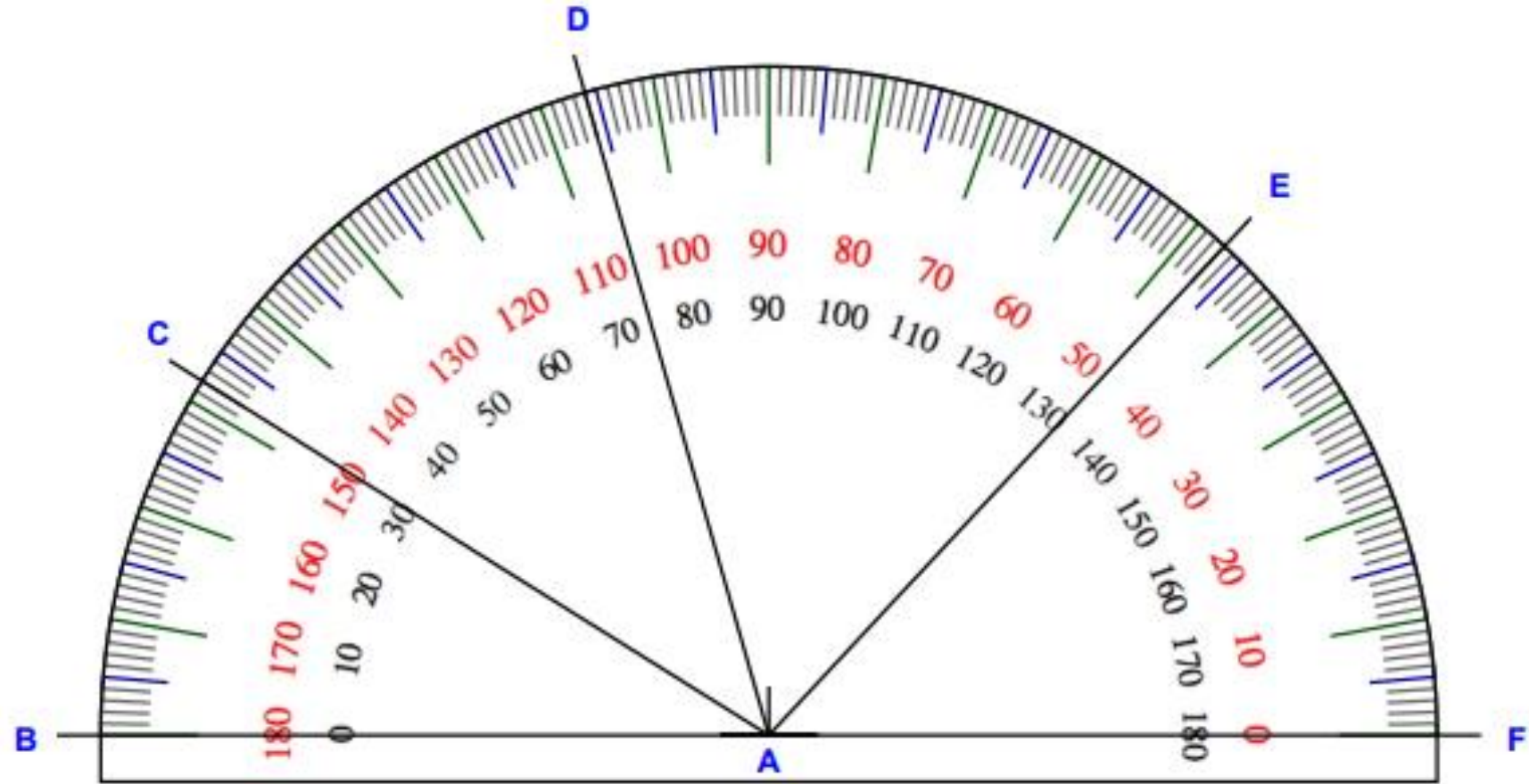
This website will allow you to practice using the protractor to measure angles.

You may only be able to answer some of the questions, as I have seen this does not work well on a tablet, because you need to hold down the shift key to rotate the protractor.

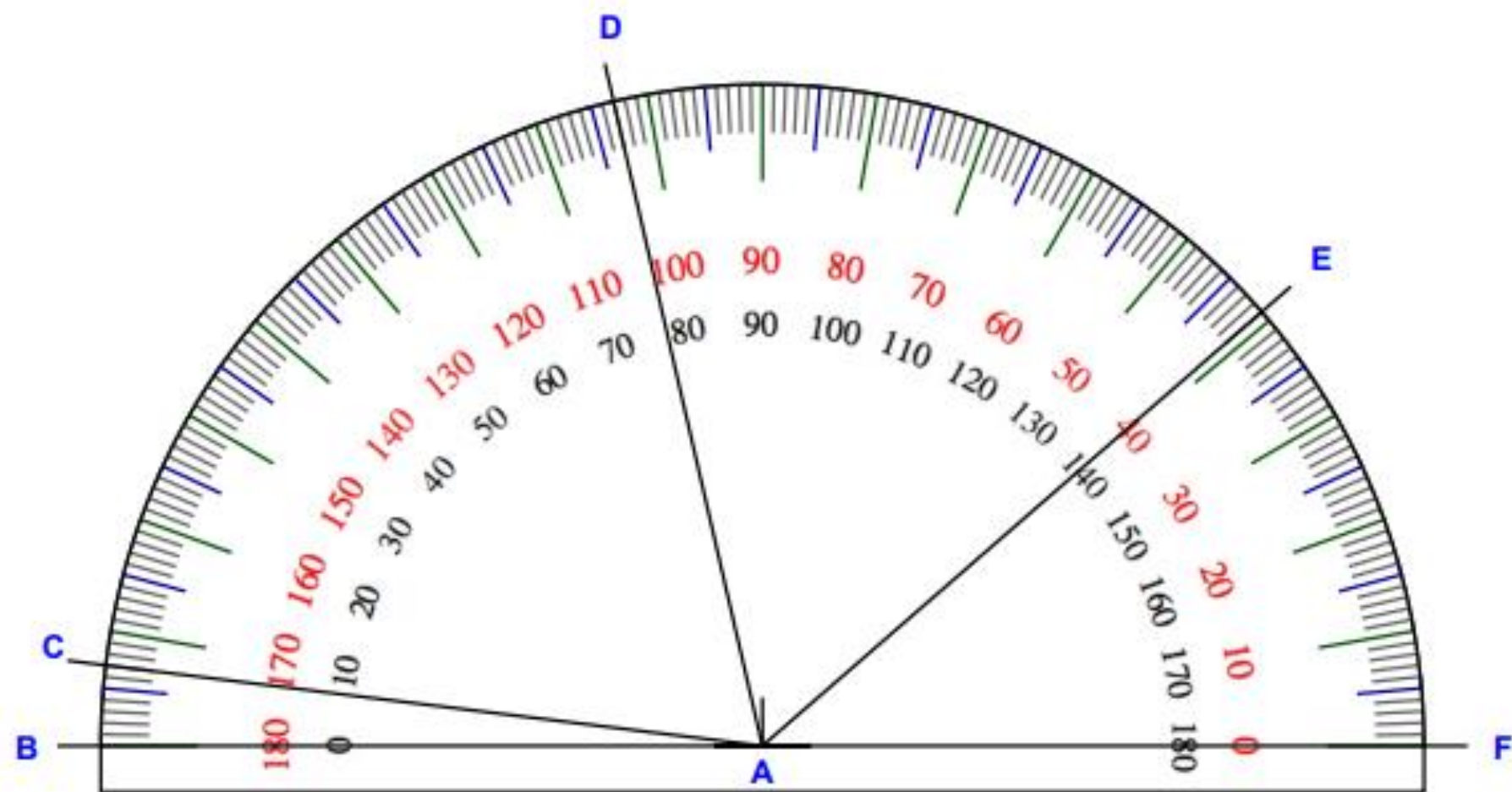
<https://www.mathsisfun.com/geometry/protractor-using.html>

This website has some short videos demonstrating how to use your protractor and allows you to measure some angles using a protractor, however not on a tablet.

Apologies I have struggled to find a website that allows you to do the measuring on a tablet or phone.



\angle CAB _____
 \angle DAB _____
 \angle EAB _____
 \angle CAF _____
 \angle DAF _____
 \angle EAF _____



$\angle CAB$ _____ $\angle DAB$ _____ $\angle EAB$ _____ $\angle CAF$ _____ $\angle DAF$ _____ $\angle EAF$ _____

<https://www.mathplayground.com/alienangles.html>

This website does seem to work on a tablet.

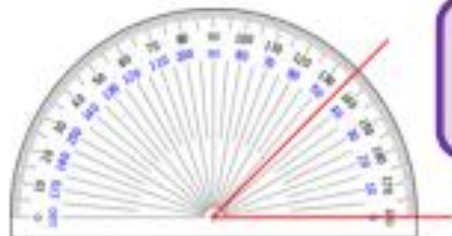
You must draw the slider along to make the 'alien angle' requested.

How close can you get?

Fire the rocket to see how far off you were in your estimate.

My best estimate was 1 degree out...who can get an exact angle????

Three children are measuring angles. Can you spot and explain their mistake?



My angle measures 135°

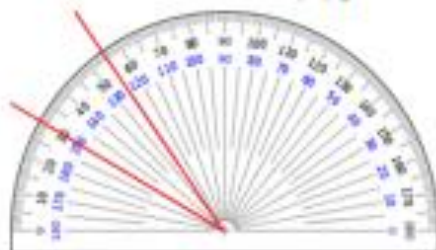


Mo

My angle measures 55°



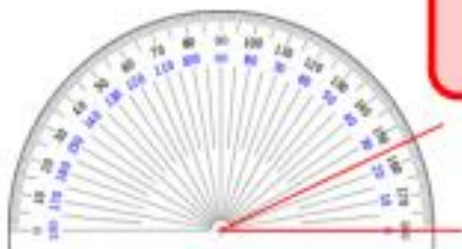
Dora



My angle measures 35°



Alex



See the next page for the answers.

Mo hasn't recognised his angle is acute, so his measurement is wrong.

Alex has not placed one of her lines on O. Her angle measures 25° .

Dora has misread the scale. Her angle measures 25° .

https://www.math-aids.com/Geometry/Angles/Reading_Protractors.html

This is a link to creating more worksheets – if your parents (or you) feel that you need a bit more practice.