

Objective: To know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.

- Year 5 Summer 2 Week 3:

This task is taken from the NRich website. To view the task, follow the link: <https://nrich.maths.org/1235> Included on the website are tips on how to get started.

Estimating Angles

Age 7 to 14 ★

This game offers you an opportunity to improve your ability to estimate angles.

You can either play on your own or challenge a friend.

The closer you get to the target angle the more points you will score.

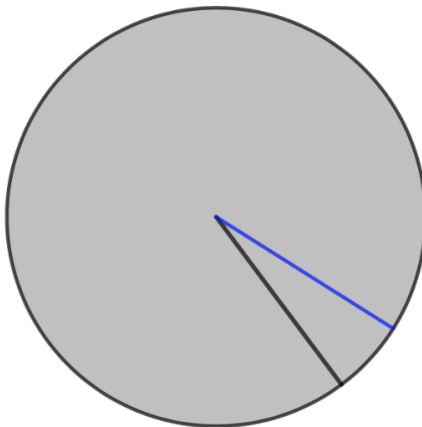
There are four levels:

Level 1 : 0 – 90°
 Level 2 : 0 – 180°
 Level 3 : 0 – 270°
 Level 4 : 0 – 360°

Target Angle: 14°

Stopped at 21°, 5 points
 Click to continue

Round: 1
 Score: 5
 Average: 5



Restart

level = 1

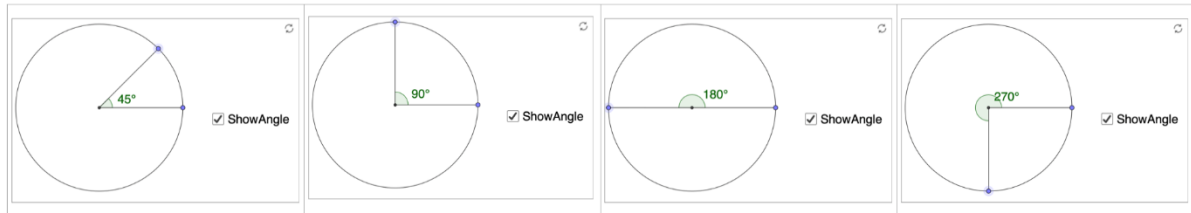
Players = 1

Error	Score
0-5°	10
6-10°	5
11-15°	2

The task may be tackled by completing the task below or by going straight to the Nrich link <https://nrich.maths.org/1235> . The online version could be played on a computer, tablet or mobile phone.

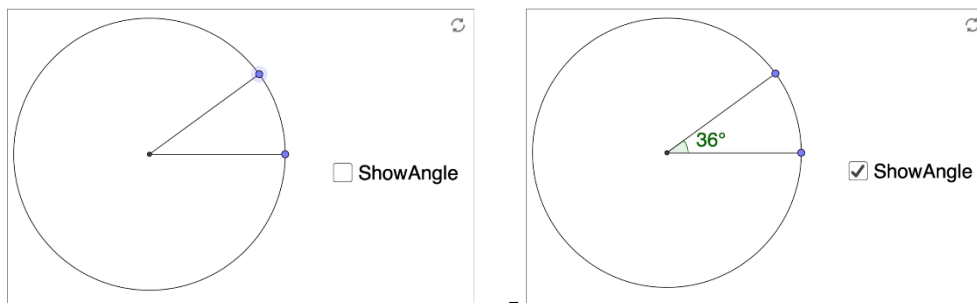
Getting started

Below are some examples of angles you can use to help you with your estimating. Try to use these examples to improve the accuracy of your estimating.

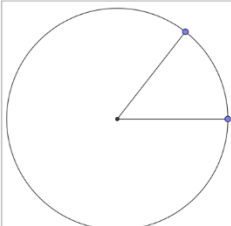
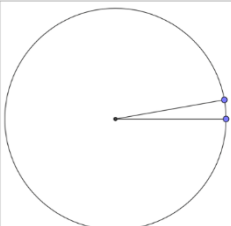
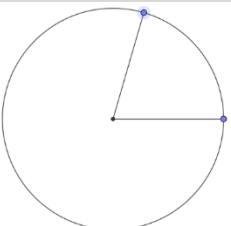
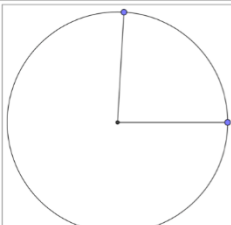
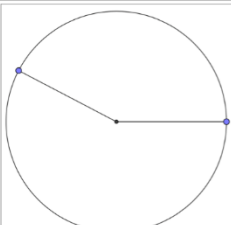
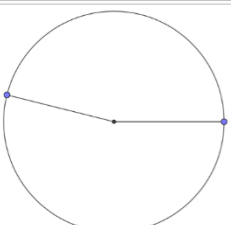
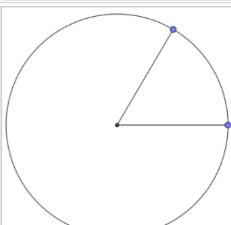
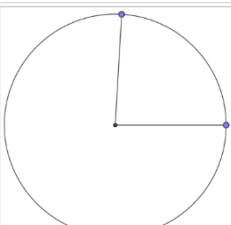
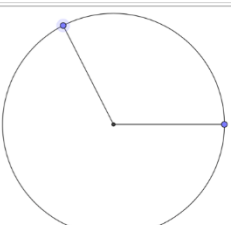
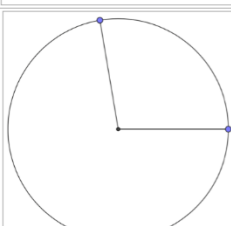
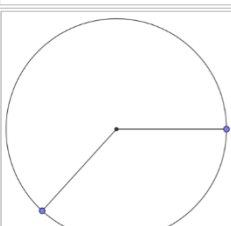
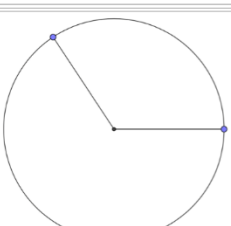


In the example below my estimate for this angle was 29° . The angle is actually 36° . So my error was 7° ($36^\circ - 29^\circ = 7^\circ$). Looking at the table below I can see that an error in the range from $6-10^\circ$ gives me a score of 5. The idea of the activity is to become as accurate as possible with your estimating and so earn a good score.

Error	Score
0-5°	10
6-10°	5
11-15°	2



Can you estimate each of the angles shown on each diagram? When you finish check against the answers on the next page. Calculate the difference between your estimate and the actual measurement. Use the scoring table on the last page to work out how many points you made on each question. Add these up for the 12 questions and see how many points you scored altogether. Can you reach 30, 40, 50 or more points?

 <input type="checkbox"/> ShowAngle	 <input type="checkbox"/> ShowAngle	 <input type="checkbox"/> ShowAngle
 <input type="checkbox"/> ShowAngle	 <input type="checkbox"/> ShowAngle	 <input type="checkbox"/> ShowAngle
 <input type="checkbox"/> ShowAngle	 <input type="checkbox"/> ShowAngle	 <input type="checkbox"/> ShowAngle
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Solutions:

