**Grade:** Junior (4-6)

**WEEK 2 – Angle Game**

**Unit:** Spatial Sense

**Curriculum Expectations**  
explain how protractors work, use them to measure and construct angles up to 180°, and use benchmark angles to estimate the size of other angles

**SEL:** see themselves as capable math learners, and strengthen their sense of ownership of their learning, as part of their emerging sense of identity and belonging

**Activity  
1)** Students will design and play a game where they estimate angles and classify them using two overlapping congruent circles **2)** Students will need take two different coloured sheets of paper, draw/trace and cut out one congruent circles on each colour of paper and cut a line on the radius of each circle.  
**3)** Overlap the circles at the cuts and spin them together (Like the image below)  
**4)** Using the measurements on the recording sheet, students will spin the circles to create an estimate of the size of the angle   
**5)** Students will then measure the estimated angle created using a protractor. Record the measurement of the angle created and subtract that from the original. Record the difference  
6) Repeat for all angles. Compete by comparing your score against a friend or family member or your personal best! Lowest score wins!  
**Note:** This can be done virtually as a competition between students if the teacher chooses to run it with the full class. Alternatively, if students are working individually, they can extend the number of angles to measure or can repeat the sheet and challenge their personal best average scores

A close up of a logo

Description automatically generated

**Check for Understanding**   
I understand how to define different angles based on the criteria provided  
I understand how to create angles up to 1800  
With practice my estimates got more accurate.

**Materials**   
Recording sheet (attached below), pencil, scissors, protractor (can be printed from online), 2 different colours of paper (shade one with a pencil if necessary)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Angle Measurement | Type of angle (acute, right, obtuse, straight) | Measurement of your estimate | Difference between angle and estimate | Draw the correct angle |
| 450 | acute | 38 | 7 | Living Life at the Angle of 45 Degrees - Community in Mission |
| 850 |  |  |  |  |
| 1200 |  |  |  |  |
| 1800 |  |  |  |  |
| 600 |  |  |  |  |
| 200 |  |  |  |  |
| 900 |  |  |  |  |
| 1650 |  |  |  |  |

Total: