

### Regular Award

Regular polygons (2D shapes) have all sides the same length.

**1<sup>st</sup>** Got his/her **FIRST** certificate!!!!

### Irregular Award

Irregular polygons (2D shapes) have at least one side a different length than the others.

**2<sup>nd</sup>** Got his/her **SECOND** certificate!!!!

### Right Angle Award

A right angle has  $90^\circ$ . It is a quarter of a turn because a whole turn is  $360^\circ$ . You can measure it by using a protractor or the corner of a piece of paper. You show a right angle by using a square in the angle.

**3<sup>rd</sup>** Got his/her **THIRD** certificate!!!!

### Acute Angle Award

An acute angle is an angle with less than  $90^\circ$ .

**4<sup>th</sup>** Got his/her **FOURTH** certificate!!!!

### Other Angles Award

An obtuse angle is an angle that is between  $90^\circ$  and  $180^\circ$ . Reflex angles can be between  $180^\circ$  and  $360^\circ$ . A straight line is  $180^\circ$ . A full turn is  $360^\circ$ .

**5<sup>th</sup>** Got his/her **FIFTH** certificate!!!!

### Parallel Award

Parallel lines run next to each other and are always the same distance apart. No matter how long they are, they will never cross. They are often shown by the  $\parallel$  sign.

Perpendicular lines always meet or cross at  $90^\circ$ .

**6<sup>th</sup>** Got his/her **SIXTH** certificate!!!!

### Symmetry Award

A polygon has reflective symmetry if one half is the mirror image of the other half.

Some polygons can have many lines of symmetry. This is called rotational symmetry.

**7<sup>th</sup>** Got his/her **SEVENTH** certificate!!!!

### Triangle Award

Triangles are polygons with 3 angles and 3 sides when you add their angles, it always makes  $180^\circ$ .

Equilateral triangles have all sides the same length, and all angles  $60^\circ$ .

Isosceles triangles have 2 angles and 2 sides the same.

Scalene triangles have all sides and angles different.

A right angle triangle has one right angle in it.

**8<sup>th</sup>** Got his/her **EIGHTH** certificate!!!!

### Quadrilateral Award

Quadrilaterals are polygons with 4 sides. There are four basic quadrilaterals.

Rectangles have 4 right angles opposite sides equal length and 2 pairs of parallel lines. A square has all the features of a rectangle.

Trapeziums have 1 pair of parallel lines. Trapeziums have 2 sides, 1 parallel, 1 slanted and 1 right angle.

**9<sup>th</sup>** Got his/her **NINTH** certificate!!!!

### Pentagon Award

Pentagons are any 5D polygons with 5 sides.

Irregular have 5 sides.

Pentagons have 7 sides and may also be called heptagons.

**10<sup>th</sup>** Got his/her **TENTH** certificate!!!!

### Octagon Award

Octagons are 2D polygons with 8 sides.

Regular have 8 sides.

Irregular have 8 sides.

**11<sup>th</sup>** Got his/her **ELEVENTH** certificate!!!!

### 3D Award

3 dimensions is just one dimension.

2 dimensional mean you have height and width.

3 dimensional mean you have height width and depth.

Objects with 3D shapes are called solids. A corner is a vertex. A flat surface is called a face.

**12<sup>th</sup>** Got his/her **TWELFTH** certificate!!!!

### Nets Award

A net is a flat surface that when folded, will make a 3D object.

When unfolded to show flat surfaces they are called nets. They are used to make 3D objects without gluing or taping.

**13<sup>th</sup>** Got his/her **THIRTEENTH** certificate!!!!

### Cuboid Award

A cuboid has 8 vertices, 12 edges and 6 rectangular faces.

Trapeziums are 2D shapes with 4 sides, one pair of parallel sides and one right angle.

A cube is a special case of a cuboid. It has 8 vertices, 12 edges and 6 square faces.

**14<sup>th</sup>** Got his/her **FOURTEENTH** certificate!!!!

### Prism Award

A prism has 2D shapes for ends and flat sides. The ends are the same shape and size. The flat sides are called faces.

A cylinder has two flat circular faces and one curved surface.

**15<sup>th</sup>** Got his/her **FIFTEENTH** certificate!!!!

### Pyramid Award

A pyramid has a flat base and triangular sides that meet at one point.

The point the sides meet is called the apex.

The flat base is called the base.

The sides are called the faces.

**16<sup>th</sup>** Got his/her **SIXTEENTH** certificate!!!!

### Sphere Award

A sphere is a perfectly round 3D object.

A sphere has one continuous curved surface.

A sphere has a flat circular base called a hemisphere.

**17<sup>th</sup>** Got his/her **SEVENTEENTH** certificate!!!!

### Cylinder Award

A cylinder has two flat circular faces and one curved surface.

A cone has one flat circular face and one curved surface.

**18<sup>th</sup>** Got his/her **EIGHTEENTH** certificate!!!!

### Perimeter Award

The perimeter is the distance around a shape.

Perimeter = length + width + 2 x height

Perimeter = length + width + 2 x height

**19<sup>th</sup>** Got his/her **NINETEENTH** certificate!!!!

### Area Award

The area is the space inside a shape.

Area = length x width

Area = length x width

**20<sup>th</sup>** Got his/her **TWENTIETH** certificate!!!!