At home materials

Pack 3: Quadrilaterals

Session A) Creating quadrilaterals
Session B) Quadrilateral symmetry
Session C) Angles in quadrilaterals
Session D) Describing quadrilaterals
Pack 3 Session A

**Talk Task:** Creating quadrilaterals

[Diagram of two triangles and a rectangle with dashed lines dividing the triangles into quadrilaterals]
Pack 3 Session A

**Activity:** Creating quadrilaterals
Pack 3 Session B
Talk Task: Quadrilateral symmetry
## Pack 3 Session B
### Activity: Quadrilateral symmetry

<table>
<thead>
<tr>
<th></th>
<th>Rotational order of 1</th>
<th>Rotational order of 2</th>
<th>Rotational order of 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 lines of symmetry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 line of symmetry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 lines of symmetry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 lines of symmetry</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A quadrilateral can have…

… acute angles

… obtuse angles

… reflex angles
Pack 3 Session C  
**Activity:** Angles in quadrilaterals

Which of the following angle combinations are possible? Sketch examples and label with information.

<table>
<thead>
<tr>
<th>3 obtuse angles, 1 acute angle</th>
<th>3 acute angles, 1 obtuse angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 acute angles, 2 obtuse angles</td>
<td>2 acute angles, 2 reflex angles</td>
</tr>
</tbody>
</table>

What other angles are possible? What angles are not possible?
## Pack 3 Session D

**Talk Task:** Describing quadrilaterals

<table>
<thead>
<tr>
<th>A rectangle has four right angles</th>
<th>A square has four right angles and four equal length sides</th>
</tr>
</thead>
<tbody>
<tr>
<td>A parallelogram has two pairs of parallel sides and equal opposite angles</td>
<td>A rhombus is an equilateral parallelogram. It has two pairs of parallel sides that are all equal in length.</td>
</tr>
<tr>
<td>A trapezium has one pair of parallel sides</td>
<td>A kite has two pairs of equal length adjacent sides.</td>
</tr>
</tbody>
</table>

### Always

- A square is a rectangle
- A square is a parallelogram
- A rhombus is a square
- A parallelogram is a rectangle

### Sometimes

### Never
Pack 3 Session D

**Activity:** Describing quadrilaterals

Draw another triangle to create a quadrilateral and label with information.

Build different quadrilaterals with two triangles and label with information.