**Activity 27**

**Teachers’ notes**

This activity encourages children to recognise and use 2-D shapes. The initial activity based on the ‘shape cat’ provides a good introduction to common shapes. Asking children to make their own shape dogs allows them to use their imagination whilst at the same time using shape vocabulary.

**Learning objectives**

- To recognise and name 2-D shapes
- To describe the properties of 2-D shapes
- To create 2-D shapes

**Resources**

2-D shapes that can be used as templates or dog coloured paper shapes, Shapes (following), crayons.

**Activity**

Select a triangle. Ask the children to name it and describe the properties that make a shape a triangle. Repeat this for other shapes. Show the children the cat shape picture. Ask them which shapes have been used to make the cat and explain how to fill in the table.

Challenge the children to make pictures of dogs using 2-D shapes. As the children work encourage them to use shape language to describe what they are doing.

**Support/Extension**

Some children may require help to realise that the whiskers are not triangles. Reinforce the fact that triangles have three sides.

Some children may find it easier to use paper shapes for making dog collages rather than drawing their own shapes or around templates.

Extend children by using a greater variety of shapes for the dog pictures. Encourage them to name the shapes and describe their properties.
# Shapes

<table>
<thead>
<tr>
<th>Shape</th>
<th>Number in the cat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangle</td>
<td>△</td>
</tr>
<tr>
<td>Rectangle</td>
<td>□</td>
</tr>
<tr>
<td>Circle</td>
<td>○</td>
</tr>
</tbody>
</table>

Use shapes to make a picture of a dog. Say how many of each shape you use.

<table>
<thead>
<tr>
<th>Shape</th>
<th>Number in the dog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangle</td>
<td>△</td>
</tr>
<tr>
<td>Rectangle</td>
<td>□</td>
</tr>
<tr>
<td>Circle</td>
<td>○</td>
</tr>
<tr>
<td>Pentagon</td>
<td>□</td>
</tr>
<tr>
<td>Hexagon</td>
<td>○</td>
</tr>
</tbody>
</table>
Activity 28

Teachers’ notes
The ‘balanced bones’ activity gives children the opportunity to reinforce number bonds and to solve problems.

Learning objectives
To recall addition and subtraction facts to 20
To use number facts to solve problems

Extension
Extend more able children by using larger numbers, and also more numbers within each bone.

Resources
Balanced bones (following), pencils, paper, digit cards. Balanced bones is also available as an interactive whiteboard activity on this disk.

Activity
Use digit cards to help the children to practise recalling number facts with speed. Ask the children to display the number which needs to be added to one held up to make 10. Repeat this for 20 and then other numbers between 10 and 20.
Show the children the balanced bones. Explain that each bone must add up to the same number. Challenge the children to make as many balanced bones as possible.
Balanced bones

These are balanced bones. The total on each side is 9.

Make other balanced bones using the numbers 1 to 6.

Now make other balanced bones using the numbers 1 to 9.
Learning objectives
To carry out a survey about dogs and cats
To represent the data in bar charts and pictograms
To interpret the bar charts and pictograms

Resources
Dog and cat survey (following), pencils, squared paper, rulers.

Activity
Discuss the work of Battersea Dogs & Cats Home. Ask who in the class has a dog or a cat. Did any of them come from a rescue centre? Explain that the class, working in groups, is going to carry out a survey about the dogs and cats owned by pupils in the school. Remind the children of how to do tally charts and the different ways that data can be represented.
Divide the class into groups. Give each group a data sheet and encourage the children to decide on the types of questions they would like to answer within the survey and the types of data that they will need to collect.

Activity 29

Teachers’ notes
Carry out the survey. When bar charts and pictograms have been completed, encourage the children to discuss which ones show the results most clearly.

Cross-curricular links
Literacy – Write letters to ask each class to complete the surveys and to send them back by a given time.
ICT – Use ICT to present the findings.

Support/Extension
Some children will benefit from being given specific questions to investigate. Extend children by asking them to present the data in pie charts.

Carrying out a survey within the school, on dogs and cats owned by other children, will help to encourage the children to be more aware of pets from rescue centres. As the children write their own questions to be answered in the survey, they will be encouraged to consider how data can best be collected and represented.
Dog and cat survey

Questions to be answered:

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Data to be collected:

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