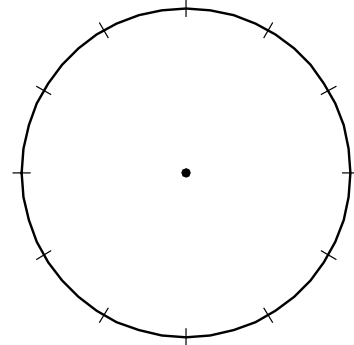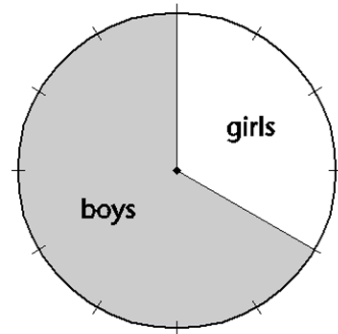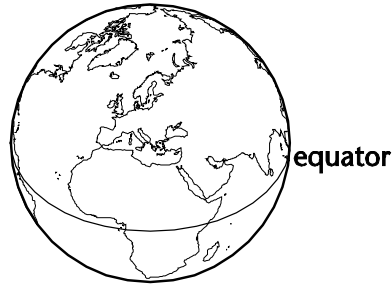# Pie Charts - Activity

Statistics: Pie Charts

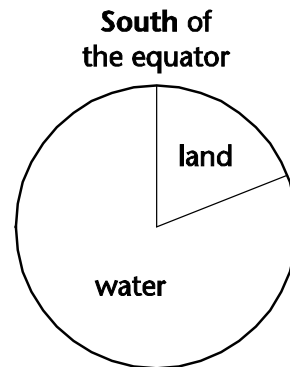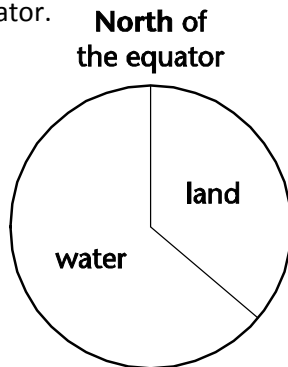### Playgroup

There are 48 children altogether in a playgroup.
- What fraction of the children are girls?
- What percentage of the children are girls?
- How many of the children are girls?

- 24 of the children are 4 years old.
- 20 of the children are 3 years old.
- 4 of the children are 2 years old.
  - Show this information on the diagram on the right.
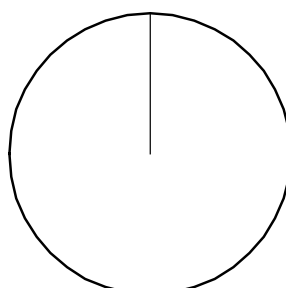 - Label each part clearly.

Land and water

equator

- These pie charts show the area of the Earth's surface covered by water and land north and south of the equator.

North of the equator

land

water

South of the equator

land

water

- Approximately what percentage of the Earth's surface north of the equator is covered by land?
- Approximately what percentage of the Earth's surface south of the equator is covered by land?
- Sketch a pie chart to show the area of the whole Earth's surface covered by water and by land. Label the parts of your pie chart 'water' and 'land'.
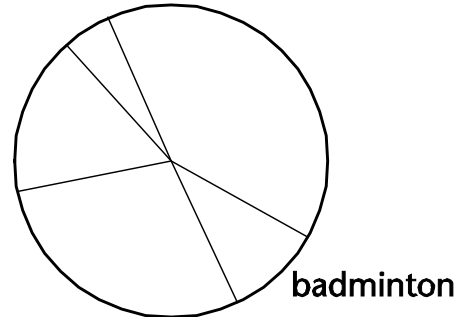
Whole Earth

Pie Charts - Activity

Sport

- At a sports centre, people take part in one of five different sports.
- This table shows the percentages of people who played badminton, football and squash on Friday. Label the correct two sections of the pie chart 'football' and 'squash'. 'Badminton' has been labelled for you.

Friday	
Badminton	10%
Football	40%
Squash	5%
Swimming	**?**
Tennis	?

badminton

- On Friday more people went swimming than played tennis.
  - Use the chart to estimate the percentage of people who went swimming.
  - Use the chart to estimate the percentage of people who played tennis.
    Make sure you have accounted for all the people.

- Altogether 260 people played the different sports on Friday.
  - Complete this table to show how many people played badminton, football and squash on Friday.

Sport	Percentage	Number of people
Badminton	10%	26
Football	40%	………
Squash	5%	………

- Altogether 260 people played the different sports on Friday and 700 people played the different sports on Saturday.
- 40% of the people played football on Friday, but only 20% of the people played football on Saturday.
- Mike said: '40% is more than 20%, so more people played football on Friday.'
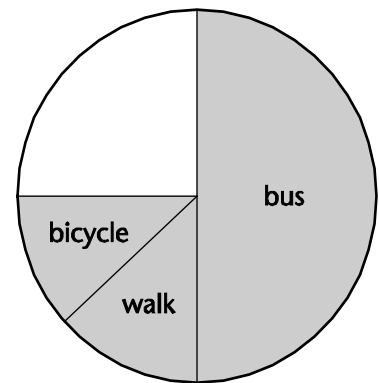- Mike is wrong. Explain why.
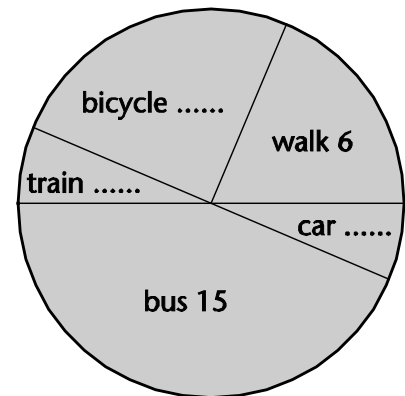
Pie Charts - Activity

Travel

- There are 24 pupils in Jim's class.

- He did a survey of how the pupils in his class travelled to school.

- He started to draw a pie chart to show his results.

- 4 pupils travelled to school by train.
  - Show this on Jim's pie chart as accurately as you can.
  - Label this part 'train'. Label the remaining part 'car'.

Jim's class (24 pupils)

- There are 36 pupils in Sarah's class.

- She did the same survey and drew a pie chart to show her results.

- 15 pupils travelled by bus and 6 pupils walked.
  - On Sarah's pie chart write how many pupils travelled to school by train, car and bicycle.

Sarah's class (36 pupils)

- Jim says:
  - '15 pupils in Sarah's class travelled by bus. Only 12 pupils in my class travelled by bus. Sarah's pie chart shows fewer people travelling by bus than mine does.So Sarah's chart must be wrong.'

- Explain why Jim is wrong.