Working in health and social care involves **understanding what is needed** in different neighbourhoods.

Some neighbourhoods have lots of young people. Others have lots of the elderly.

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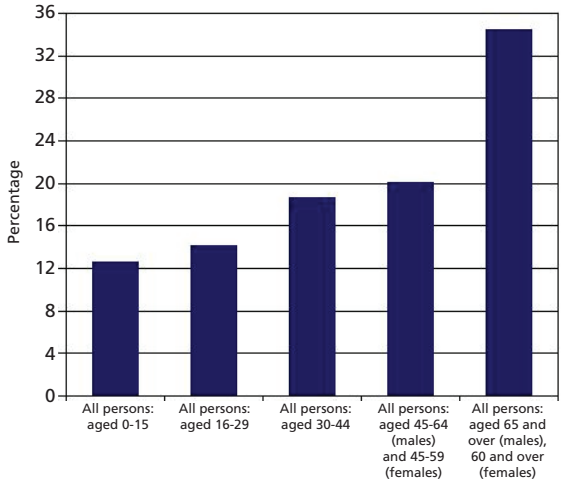
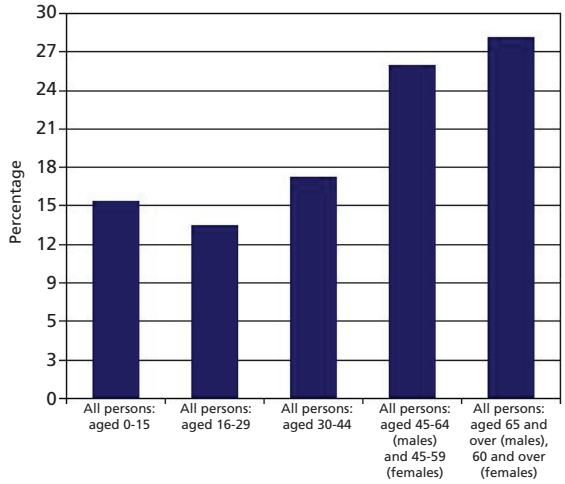
Match the graphs to the neighbourhood descriptions.

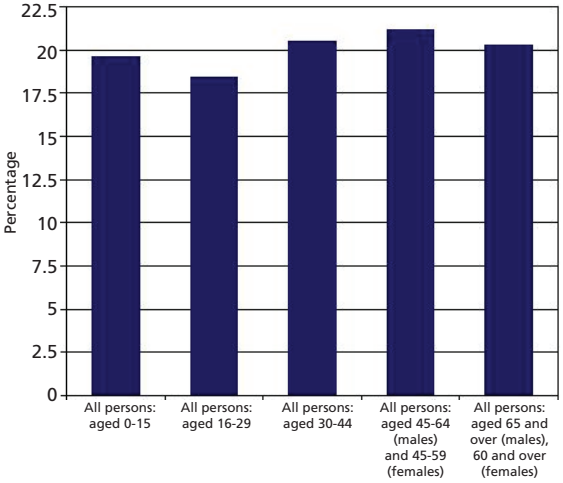
Find the population graph for **your neighbourhood** at

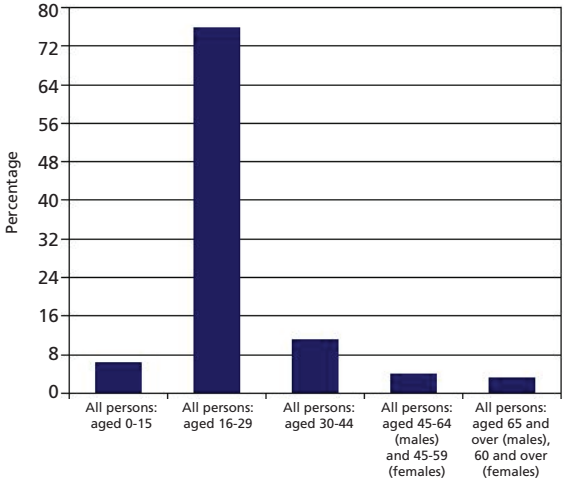
http://neighbourhood.statistics.gov.uk/dissemination/

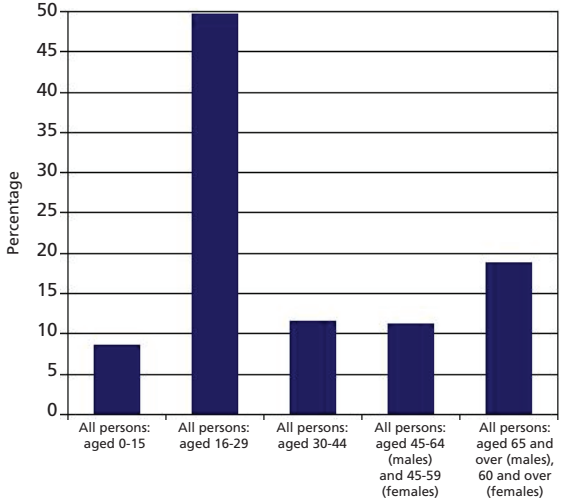
Write a paragraph describing what the graph shows about where you live.

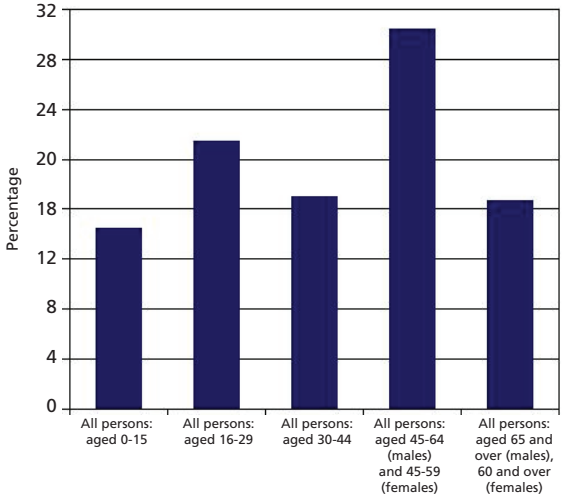












A lot of young people leave Easington to find work.

Parson Cross, Sheffield has a mostly very settled population.

The leafy suburb of Broomhill, Sheffield is popular with university students.

Harrogate is a pleasant, quiet town. People like to retire there.

Many students in Bradford live in the lively downtown part of the city.

The Yorkshire Sculpture Park near Wakefield includes Bretton College. Older people find it too isolated.

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Population statistics are often given in the form of a pyramid.

The pyramid helps you to see **population trends** and changes.

These are important for health and social care planning.

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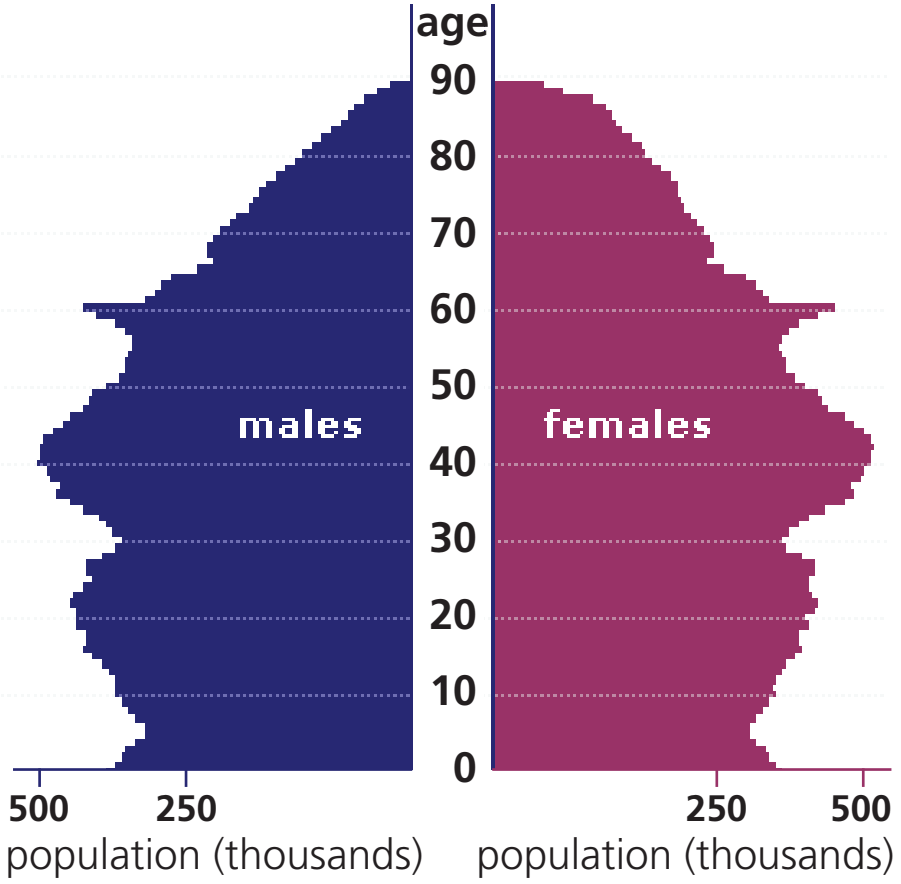
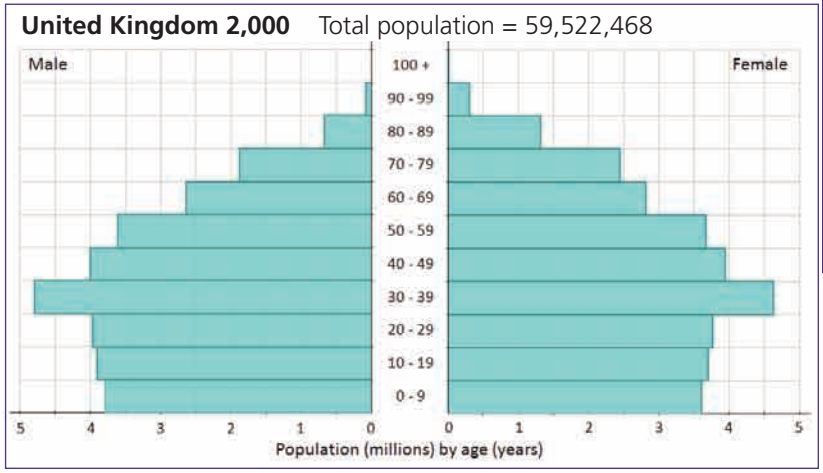
Yearly population pyramid for the UK

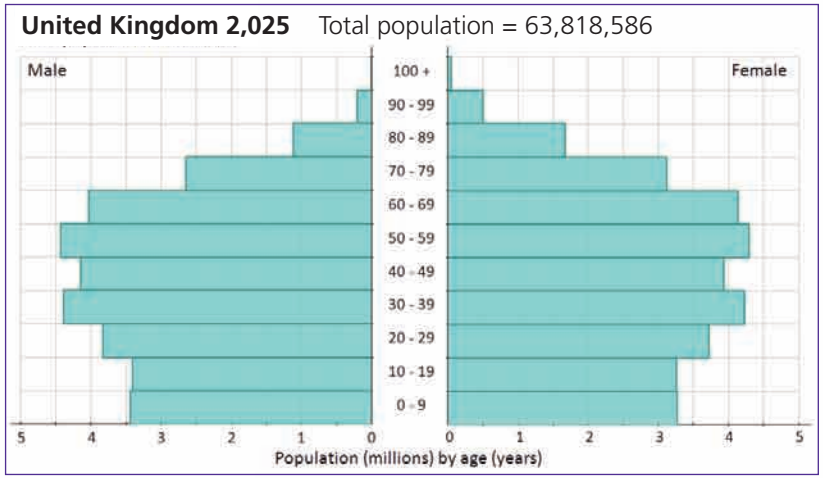


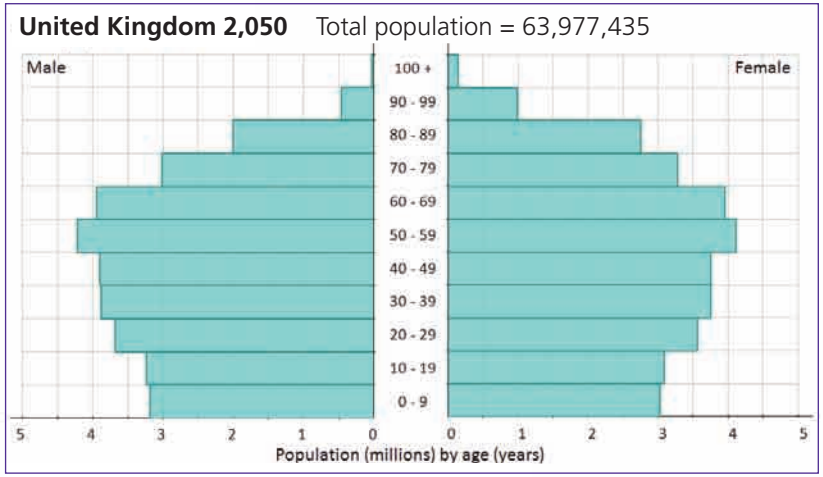
Population: by gender and age, mid-2007

Source: Office for National Statistics

Think of as many reasons as possible for the shape of the population pyramid.







Source: United States Census Bureaux, International Data Base

The population of the UK is changing.

It is expected that there will be **more old people** and fewer young people in 50 years time.

The **working** population is approximately 20 to 65 years old. These people work to pay for the **non-working** population.

For each of the three years, work out a good estimate for

- the population of working age
- the young
- the old.

What is the ratio of **working age** to **non-working age** populations?

How is this ratio changing?

Write a paragraph about **what this means** for health and social care policy.

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Teacher notes

Health and Social Care : Getting on

Description

Demographic changes are significant for people working on planning provision in this sector.

Activity 1: Neighbourhoods

Activity 2: Population pyramid

Activity 3: Providing for the old

Population demographics vary considerably from neighbourhood to neighbourhood. Neighbourhoods starts as a matching puzzle and then asks pupils to access data about their own neighbourhood from the Office of National Statistics (ONS) website. Unless the school catchment area is very small, interesting differences between pupils' data are likely to emerge and to provide the focus for a class discussion.

Population pyramid is a thinking and discussion activity. Pupils need to be discussing in small groups and then sharing their ideas with the whole class. They will need a copy of the pyramid to share and you will also need the pyramid displayed for the whole class, preferably on an interactive whiteboard. They will probably need some specific numerical questions to get started on interpreting the pyramid.

For example:

- How many women are 30 years old?
- Are there more men or women aged 80? How many more?
- When were people born who are now aged 70?

Resources

Calculators, scissors, A3 paper, access to http://www.ons.gov.uk/about/index.html

In each case, ask groups to illustrate their answer by annotating the displayed pyramid. Then they can consider which parts of the pyramid relate to some specific facts about the population.

For example:

- The Second World War ended in 1945 and a lot of married men returned to their families.
- Fertility rates dropped in the 1970s.
- In the 1920s and 1930s, many more men than women smoked.
- The birth rate is currently rising.

Finally ask if there are any other features they have observed.

Providing for the old shows how population pyramids can be used in planning and policy formation. It focuses on age demographics and asks pupils to carry out calculations on figures for 2000 and projected figures for 2025 and 2050, working out the ratio of working age and non-working age population groups. Encourage them to reflect on the trends in the data and the impact on policy.

The Mathematics

This set of activities requires pupils to interact with a variety of data sets and to use logical thinking skills to interpret what they find. Providing for the old also involves interpreting scales, calculations and consideration of ratio and proportion.