



General Certificate of Education
Advanced Subsidiary Examination
January 2011

General Studies (Specification B)

GENB2

Unit 2 Space

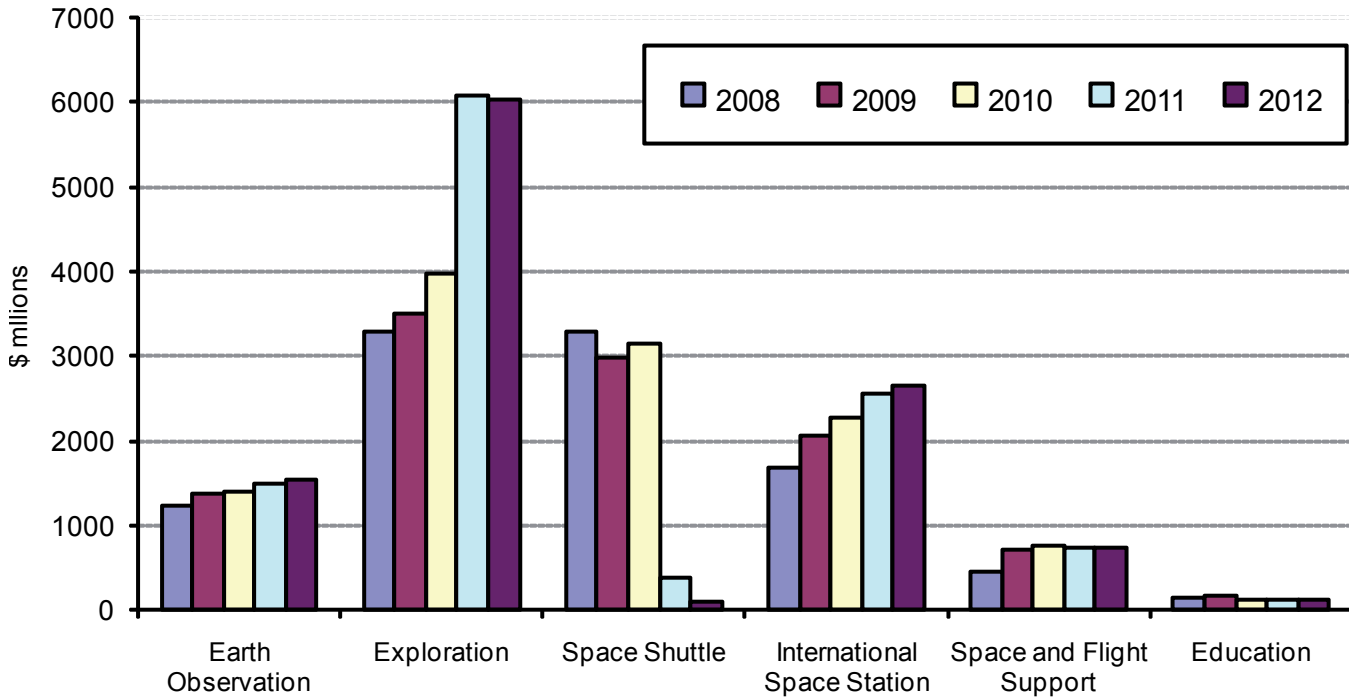
Insert

Source Booklet for use with **Questions 1, 2 and 3**

Study **Sources A** and **B** and then answer **Question 1**.

Source A

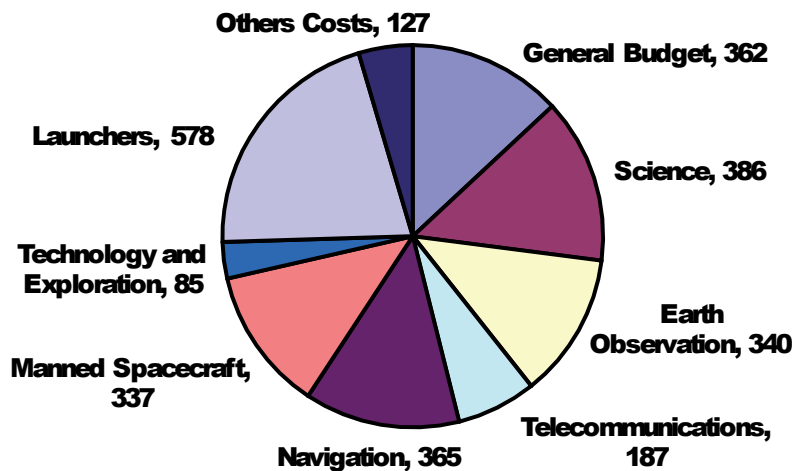
**National Aeronautics and Space Administration (NASA)
Budget Summary 2008–2012 (USA \$ millions)**



Source: data from www.nasa.gov, May 2009

Source B

**European Space Agency (ESA)
Budget Summary 2007 (€ millions)**



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Study **Sources C** and **D** and then answer **Question 2**.

Source C



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Source D



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Study **Source E** and then answer **Question 3**.

Source E

Out with the new, in with the old as Britain's native species return

After 10 years, the great bustard project has reaped rich dividends when two of the birds re-introduced from Russia to Britain were found to have hatched chicks. These were the first to be born in Britain since 1832. The project is one of several recent species re-introductions by ecologists trying to reinvigorate the nation's biodiversity. Other successes include the red kite, the white-tailed eagle and the beaver. Now follow-up plans are being prepared for the hen harrier and the corncrake.

The great bustard was wiped out by intensive farming and bird-egg collectors in the 19th century. The red kite and white-tailed eagle were finished off by farmers and gamekeepers who thought the birds were killing their animals. "We have a more enlightened attitude today, so we think it is safe to bring them back," said Graham Madge of the Royal Society for the Protection of Birds.

The ultimate aim is to return the British countryside to a richer and more diverse state. It is also vital to control foreign invaders that endanger existing native plants and animals.

Japanese knotweed, which forms thick suffocating layers, costs tens of millions of pounds a year to clear up and was introduced by Victorians to give colour to their gardens. Government agencies plan to wage war on the Japanese knotweed by introducing the plant's native predator, the jumping plant louse. More than 180 species of insects found on knotweed in Japan were tested and the jumping plant louse was chosen because it was the only one that will not spread to other plant species.

The move means that other non-native species could be introduced. This raises questions about what kind of wildlife we want for Britain and how we can ensure it is kept healthy and diverse. Should we re-introduce beavers or red kites and import insects to kill off invaders? According to Andrew Wood of *Natural England*: "The more diversity, the healthier the environment. Predators such as the white-tailed eagle help keep down populations of small mammals and red kites clean up carrion. Beavers keep woods well channelled with waterways that act as natural purification systems. We can gain a great deal from re-introductions and by keeping our wildlife as diverse as possible."

Source: adapted from an article by ROBIN McKIE, *The Observer*, 7 June 2009
guardian.co.uk © Guardian News and Media Limited 2009

END OF SOURCES