

Key Stage 3

Links with National Curriculum - Sc4 Earth and Beyond

Links with QCA - Unit 5E Earth and beyond, 7L solar system and beyond

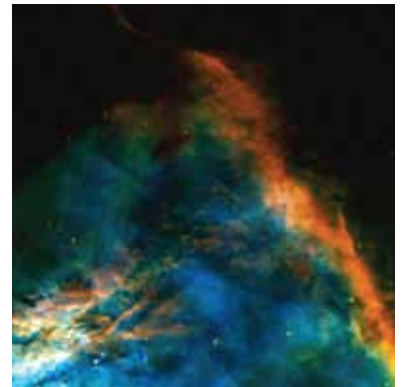
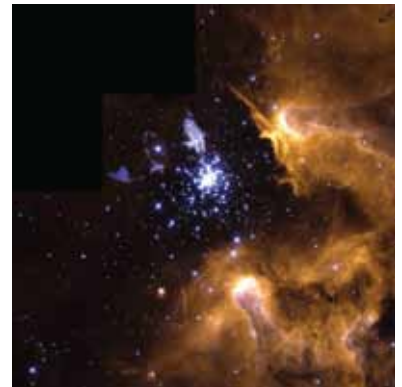
Links with NLS - speaking and listening presentations

ASTROTOURS TRAIL

Name

School

Date



© National Space Centre 2007

Astrotours, the top secret travel agency, needs your help!

We are seeking new planets to send people for an exciting holiday.

Examine some of the special features our own Solar System has to offer and then, using that information in part 2 of the trail, you can invent your very own Planet - which should be a good place for people of the future to visit.

Key Stage 3

Links with National Curriculum - Sc4 Earth and Beyond

Links with QCA - Unit 5E Earth and beyond, 7L solar system and beyond

Links with NLS - speaking and listening presentations

ASTROTOURS TRAIL

Go to The Planets gallery

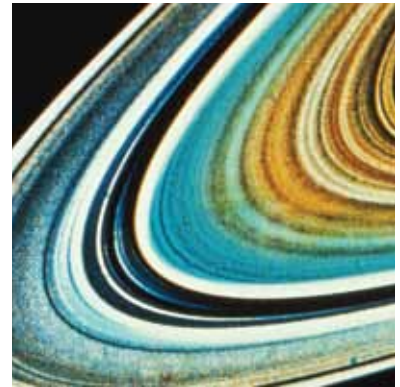
In the entrance of the Planets gallery you will see a model of the Solar System (not to scale). Hint: Look upwards!

Question 1.

Write down the names of the Planets: -

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____
- f) _____
- g) _____
- h) _____
- i) _____

What did Ptolomy (an ancient Greek) get wrong and Copernicus (he lived in the 15th century) get right?



© National Space Centre 2007



Key Stage 3

Links with National Curriculum - Sc4 Earth and Beyond

Links with QCA - Unit 5E Earth and beyond, 7L solar system and beyond

Links with NLS - speaking and listening presentations

ASTROTOURS TRAIL

Pluto was demoted to a dwarf Planet in 2006.

(A dwarf Planet is defined as a round object that has not cleared its neighbouring region of objects, and is not a satellite.)

There are currently 5 recognised dwarf Planets in our Solar System :-

- Ceres
- Pluto
- Haumea
- Makemake
- Eris

Question 2.

Which is the closest Planet to the Sun? _____

Question 3.

Choose a Planet to research in the gallery and complete the following table

Planet name		
Size		
Distance from Sun (Millions of Km)		
Length of Year (time taken for one orbit of Sun)		
Atmosphere		
Surface Temperature °C	Min	Max
How many moons (if any)		
Rings - Yes / No		
Missions from the Earth		
Are things heavier or lighter than on earth?		



Key Stage 3

Links with National Curriculum - Sc4 Earth and Beyond

Links with QCA - Unit 5E Earth and beyond, 7L solar system and beyond

Links with NLS - speaking and listening presentations

ASTROTOURS TRAIL

Question 4.

Write down at least three things about your chosen planet which you think visitors might be interested in:

Question 5.

Make a sketch of your chosen planet here:



Key Stage 3

Links with National Curriculum - Sc4 Earth and Beyond

Links with QCA - Unit 5E Earth and beyond, 7L solar system and beyond

Links with NLS - speaking and listening presentations

ASTROTOURS TRAIL

Question 6.

What kind of special features might an alien have if it was to visit this planet safely?

Question 7.

Which Apollo mission was the first to orbit the Moon?

Question 8.

What do you pass through as you travel between Mars and Jupiter?

Question 9.

There are 3 types of asteroid - name all three

- a) _____
- b) _____
- c) _____

© National Space Centre 2007

National Space Science Centre: registered charity no: 1078832



Key Stage 3

Links with National Curriculum - Sc4 Earth and Beyond

Links with QCA - Unit 5E Earth and beyond, 7L solar system and beyond

Links with NLS - speaking and listening presentations

ASTROTOURS TRAIL

Question 10.

Where in the Solar System would you most likely find Comets?

Question 11.

Comets are divided into two categories - dependant on their time to orbit the Sun

a) _____

b) _____

Question 12.

Describe a Comet in no more than six words?

Question 13.

Your mass is the same throughout the Universe, however your weight depends on gravity. What is your weight at the following places in our Solar System? (Hint: find the weighing machine)

	Mass (Kg)	Weight (N)
Earth	_____	_____
Moon	_____	_____
Jupiter	_____	_____
Mars	_____	_____

© National Space Centre 2007

National Space Science Centre: registered charity no: 1078832

ASTROTOURS TRAIL



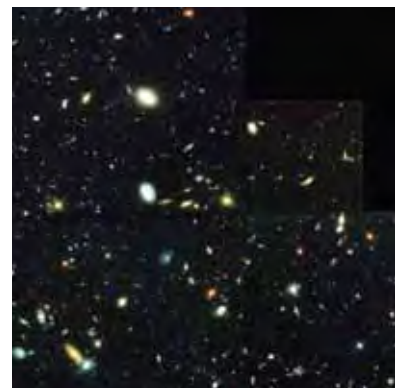
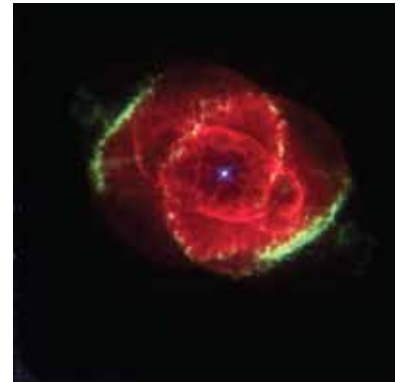
Astrotours Trail - Part 2

Now you have the opportunity to design your own Planet
(This can be completed when you get back to school)

Give your Planet a name

Draw your Planet here

What is different about your planet?



© National Space Centre 2007



Key Stage 3

Links with National Curriculum - Sc4 Earth and Beyond

Links with QCA - Unit 5E Earth and beyond, 7L solar system and beyond

Links with NLS - speaking and listening presentations

ASTROTOURS TRAIL

Why would this be a great planet to visit?

What is different about your planet?

This planet has moons.

It is the planet from the sun.

It has gas in the atmosphere.

The daytime temperature on my Planet is °C

The nighttime temperature on my Planet is °C



Key Stage 3

Links with National Curriculum - Sc4 Earth and Beyond

Links with QCA - Unit 5E Earth and beyond, 7L solar system and beyond

Links with NLS - speaking and listening presentations

ASTROTOURS TRAIL

What would I need to take with me to this Planet

I would need to take

and

this is because

I would like to visit this planet because...