

Seeing the Milky Way Galaxy

Watch the video entitled *Seeing the Milky Way Galaxy* and answer the questions below.

Q1 Name the part of the spectrum that humans can see objects in.

A1 The visible spectrum is where humans can see objects.

Q2 Identify the name of our galaxy.

A2 Our galaxy is the Milky Way.

Q3 Explain the reason why parts of our galaxy can appear dark.

A3 Space is filled with dust and cosmic debris from dead stars which block our view of objects and make them appear dark.

Q4 List the other forms of the spectrum that were named in the video.

A4 Other forms of the spectrum are: radio waves, gamma rays, x-rays and infra-red.

Q5 Identify a reason why telescopes were placed into orbit around Earth.

A5 Telescopes were placed into orbit so that we could detect light from the furthest reaches of space in terms of x-rays and gamma rays.

Q6 Identify what the telescope in x-ray mode enabled scientists to see.

A6 Scientists were able to see a star dying using x-ray mode on a telescope.

Q7 What 'mysterious' objects are telescopes allowing scientists to study?

A7 Telescopes are allowing scientists to study more about black holes.

Q8 Where is the location of the black hole in the Milky Way?

A8 The black hole is located in the centre of the Milky Way.

Q9 Describe how scientists were able to find the black hole.

A9 They identified an area where stars were located orbiting around the black hole.

Q10 How large is the black hole?

A10 The black hole is 3 million times the size of the solar system's sun.