

Time machines

Student Datasheet ...

- How long does it take the light from the nearest star to get here?
- Suppose the nearest star turned into a pumpkin. How long would it be before we saw a pumpkin appear in the night sky?
- Scientists use telescopes to look at other stars and galaxies that are much farther away. How old is the light we see from distant stars and galaxies?
- Is it possible to see the Earth in the time of dinosaurs? How could you do it?

Something else to think about...

When astronomers use powerful telescopes to look across the vast reaches of space, they are stepping inside time machines and turning the dial back millions of years. They see a picture of the early Universe exactly as it appeared millions of years ago. It sounds astonishing, but it's an everyday fact of life for astronomers who study deep space.