PHYSICS • OUR SOLAR SYSTEM • SUN AND STARS

• Quizzes

Twig

| Day and Night | | |
|---|--|--|
| Advanced | | |
| • Why does the Moon appear to move across the sky each night? | | |
| B – because the Earth is spinning C – because the Moon is orbiting the Earth | | |
| • How fast does a point on the equator travel as | | |
| the Earth spins? A – around 160 km/hour | | |
| B – around 900 km/hour C – around 1600 km/hour | | |
| | | |
| What is the speed of the Earth's poles as the Earth spins? | | |
| A – around 900 km/hour B – around 1600 km/hour | | |
| C – almost zero | | |
| | | |

| The Sun | |
|---|---|
| Basic | Advanced |
| What is the Sun mostly made of? A – hydrogen B – carbon C – oxygen | How much of the Sun is composed of helium? A – 2.3% B – 7.8% C – 12.4% |
| How much wider is the Sun than the Earth? A – twice as wide B – ten times as wide C – over 100 times as wide | • What is the temperature at the core of the Sun? A – 5400°C B – 25,000°C C – 15,000,000°C |
| How old is the Sun? A – 1.2 billion years B – 4.6 billion years C – 10 billion years | • How far is the Sun from the Earth? A – 300,000km B – 93,000,000km C – 147,000,000km |

Twic PHYSICS • OUR SOLAR SYSTEM • SUN AND STARS What Are Stars? Advanced **Basic** • Which are the hottest stars on the main How many main types of star are there? sequence? A - 1A – blue stars B – 3 B - yellow stars C – 10 C - red stars • What percentage of stars are found in the • What is the source of heat inside stars? main sequence? A – nuclear fission A-20% B – nuclear fusion B-70% C – burning with oxygen C - 90% • How much energy does a supernova • How large are red giants? release? A - 5 times the size of the Sun A – the same amount a star normally B - 30 times the size of the Sun gives out in a year C - 50 times the size of the Sun B – the same amount a star normally gives out in 1000 years C – the same amount a star normally How large are supergiants? gives out in 10 billion years A – 30 times the size of the Sun B – 100 times the size of the Sun • After a supernova what could the core of the C - 300 times the size of the Sun star become? A – a red giant B - a black hole C - a white dwarf



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What Are Stars?

Basic

Advanced

How large is a white dwarf?

- A about the same size as the Earth
- B about twice the size of the Earth
- C half the size of the Sun

• What happens when a Supergiant dies?

A – it gradually becomes cooler until it becomes cold and black

B – it explodes in a supernova

C – it contracts and becomes a white dwarf