

GCSE Physics B (Twenty First Century Science) J259/02 Depth in physics (Foundation Tier)

Question Set 31

1 James is an astronomer and he observes light from distant galaxies on Earth.

The diagram shows the spectral lines of hydrogen in the visible part of the electromagnetic spectrum, as seen on Earth, and for two galaxies at different distances away from Earth.

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(a)	James makes	a conclusion	from this data

Complete the sentences to finish James's conclusion.

Use words from the list.

You can use each word once, more than once, or not at all.

further	nearer	more	less	red	blue			
wavelength	frequen	су	faster	slower				
The	heaway the galaxies are from Earth, the							
the spectral lines are shifted towards theend of the spectrum.								
This suggests that theof the light coming from galaxies								
further away is stretched. I can conclude that more distant galaxies must be								
moving away f	from the Earth	1	, tha	an galaxies	that are closer to			
Earth, which suggests that the universe is expanding.								
James discovers a new galaxy and writes an article about it in a scientific journal.								
Before it is published it must be peer reviewed.								

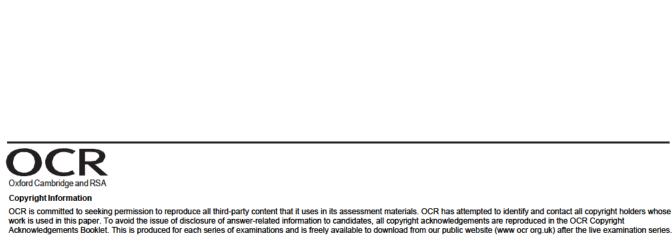
[2]

[4]

Total Marks for Question Set 31: 6

Explain why and how the article is peer reviewed.

(b)



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