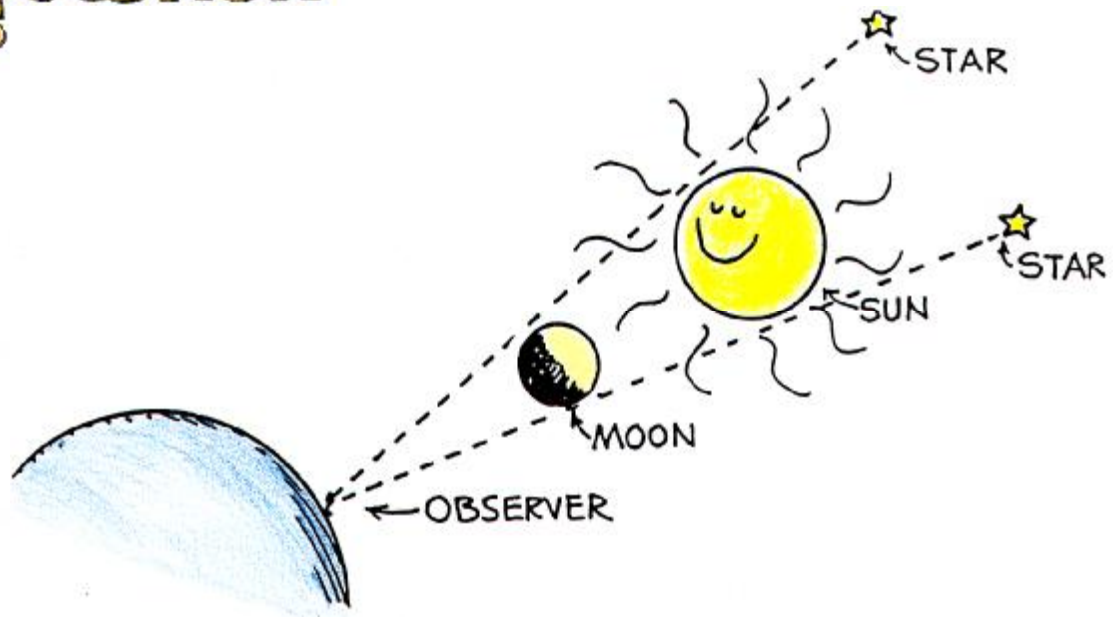
NEXT-TIME QUESTION



If the Sun passes between the Earth and a pair of stars as shown, and the Moon passes in front of the Sun and totally eclipses it so the stars are visible, then according to general relativity, the stars will appear to be slightly

a) closer together.

b) farther apart.

c) distorted, but not closer or farther apart.

NEXT-TIME QUESTION

CONCEPTUAL Physics

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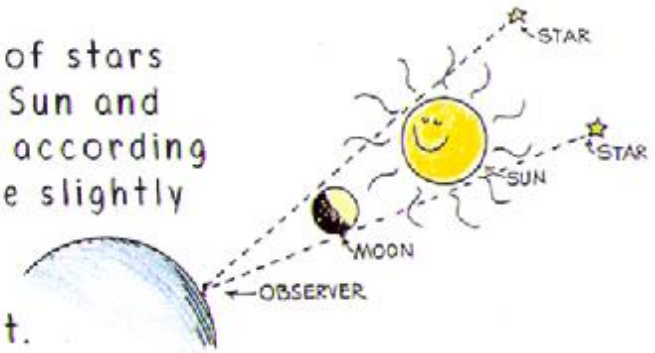
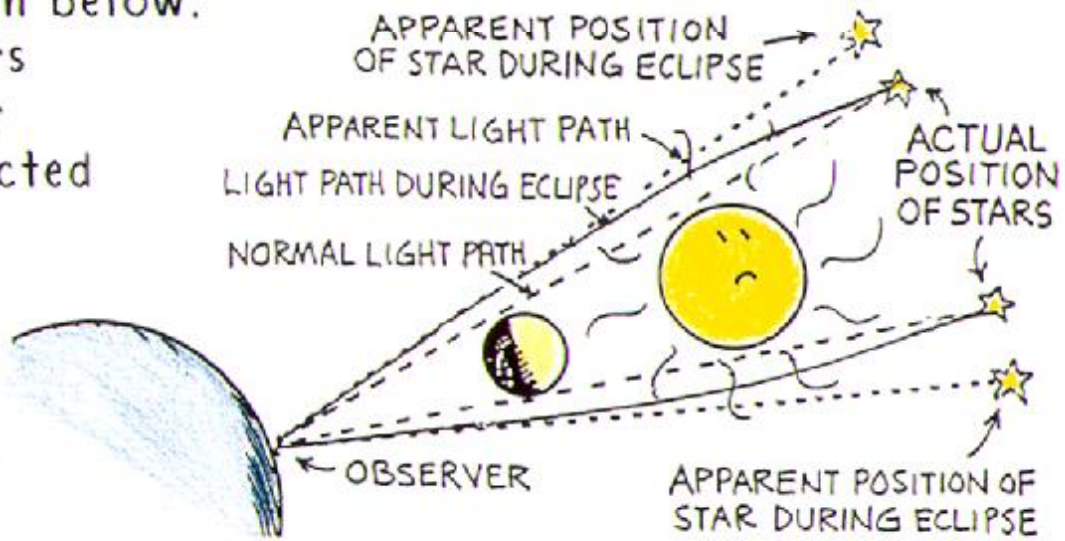


Answer: b

Light from the stars that grazes the Sun bends as shown below. Consequently, the stars appear slightly farther apart. This was predicted by Einstein in 1916 and tested during the total eclipse of the Sun in 1919. It was stunning confirmation of Einstein's general theory of relativity.



Hewitt Drew it!