Atmospheric interference

Earth is surrounded by an atmosphere. It is what allows us to breath and what stops the rays from the sun burning us instantly. It is also the reason that the sky appears to be blue when the sun's light refracts through it. If we didn't have an atmosphere, the sky would be as black as on the darkest night, and we'd be able to see the stars all day. You can get a good idea of this by watching footage from the International Space Station where there is no atmosphere at all.

Without light, there would be no colour

When you see different colours, what you are really seeing is light being reflected back in certain ways. If something is coloured red, it will reflect far more of the red spectrum of light than the other colours, so your eyes will register that signal. This is why everything looks blue if you hold a piece of blue plastic up: it only allows the blue parts of the light through it. If something doesn't reflect very much blue light, it will be very hard to see through the plastic.

SUMMARY FOCUS

1. Why is light so important to humans?
2. How could scientists make something invisible?
3. How is a rainbow formed?
4. Why is looking at a star like looking backwards in time?
5. Why is there no blue sky in space?

VIPERS QUESTIONS

R	How fast does light travel?
I	How does the author feel about the facts? How do you know?
R	How many colours are there in the white light from the sun?
V	Find and copy a word that means something happens, or appears to happen, straight away.
E	How are all of the facts in the text related to each other?