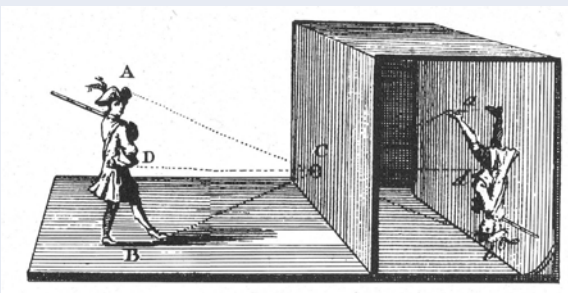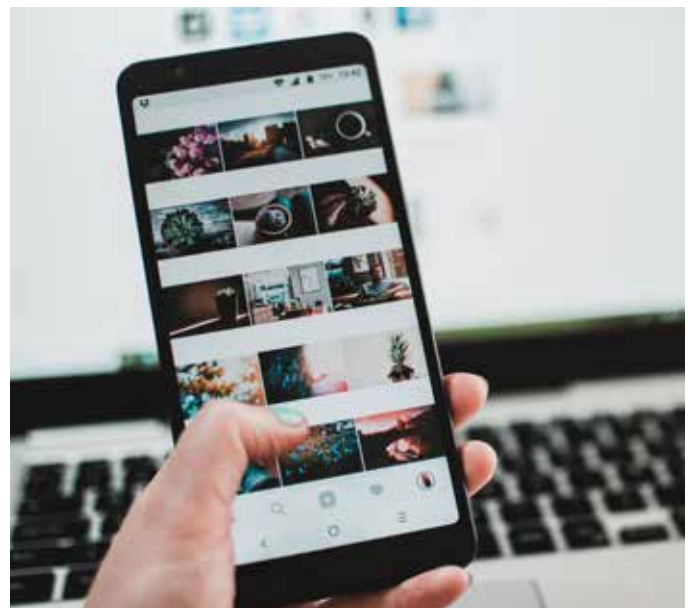# cameras

introduction

Taking great photos has never been so easy, with most of us just using our phones to take selfies or snap shots of our friends and families. But cameras as we know them have only been around for the last couple of centuries, and they would never have been developed if it weren't for the pioneering work of a Muslim scientist called Ibn al Haytham. It might be hard to believe but, before Ibn al Haytham, it was generally accepted that the human eye transmitted light outwards like a laser beam, enabling humans to see the world around. But back in the 11th Century, Ibn al Haythm realised that light actually reflected off objects and into the eye. To prove his theory, Ibn al Haytham built one the world's earliest 'camera obscuras' in the form of a darkened room into which light entered through a tiny hole. The light reflected an image of the outside world onto the wall of the darkened room and Ibn al Haytham was therefore able to prove his theory. In doing so, he had actually created one of the world's first cameras!

questions to think about

- **How many different ways are cameras used today?**
- **What do you do with the photos you take?**
- **What does being able to take photos mean to you? Your family? Your friends?**
- **How do cameras keep us safe?**
- **How are cameras used in medicine?**
- **How has photography changed the way we look at and learn about the world?**

An illustration of a Camera Obscura (above) and CCTV camera are a familiar sight (below)

where to find out more

What is a camera obscura?:
http://www.amazingcameraobscura.co.uk/howitworks.htm
How does a camera work?:
https://electronics.howstuffworks.com/camera.htm
Learn more about Ib al Haytham:
http://1001inventions.com/ibnalhaytham
How to make a room into a camera obscura:
https://www.youtube.com/watch?v=yvWX6-0_VHU

Islamic Innovations