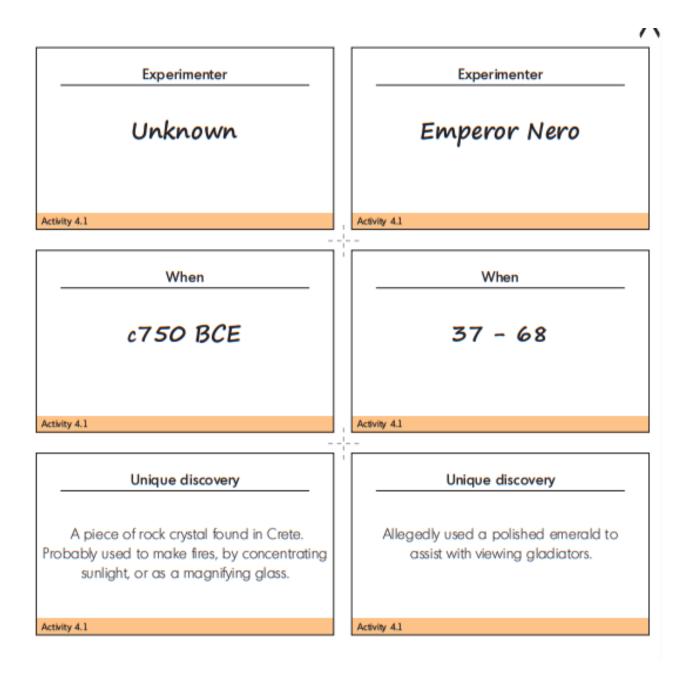
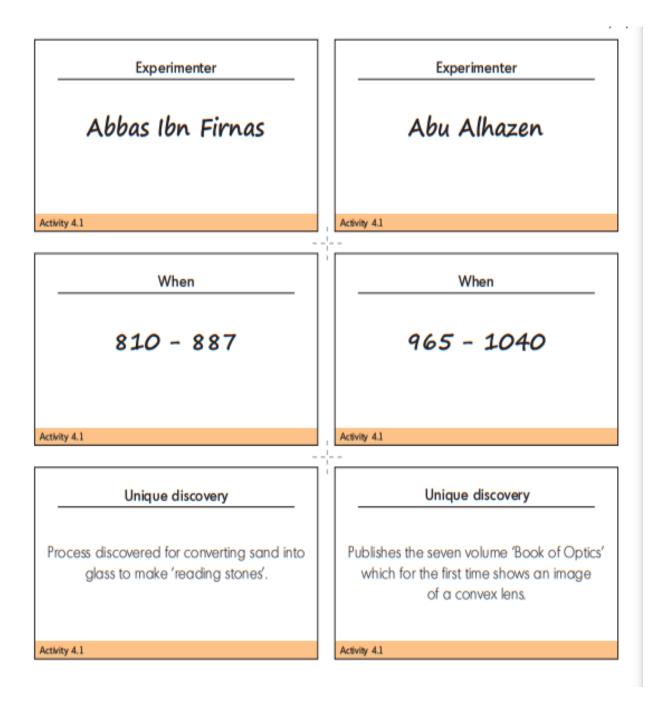
Worksheets for Schools

Timeline sorting cards – lens based discoveries

Print out, laminate and cut out the set of cards below showing historical 'lens based' optical experimenters.

You can then get the students to arrange them into the correct groups of three, linking the experimenter with the correct 'when' and 'what' cards for each experimenter's unique discovery.





| Experimenter | Experimenter |
|--|--|
| Anton van Leeuwenhoek | Hans Lippershey |
| Activity 4.1 | Activity 4.1 |
| PREMIEY 4.1 | PC0107 4.1 |
| When | When |
| 1632 - 1723 | 1570 - 1619 |
| | |
| Activity 4.1 | Activity 4.1 |
| Unique discovery | Unique discovery |
| Invented the first microscope and was the first person to see bacteria and microorganisms in units of water. | Invented the first 'telescope' instrument. |
| Activity 4.1 | Activity 4.1 |

| Experimenter | Experimenter |
|---|---|
| Galileo Galilei | Isaac Newton |
| | |
| Activity 4.1 | Activity 4.1 |
| When | When |
| 1610 | 1668 |
| Activity 4.1 | Activity 4.1 |
| - | |
| Unique discovery | Unique discovery |
| Discovered the moons of Jupiter using a telescope. | Built the world's first practical reflecting telescope. |
| Activity 4.1 | Activity 4.1 |

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| Experimenter | | Experimenter | |
|-------------------------------------|-----|-------------------------------------|--|
| Giovanni Canaletto | | Nicéphore Niépce | |
| Activity 4.1 | | Activity 4.1 | |
| Pharmy 4.1 | | | |
| When |] [| When | |
| c1740 | | c1826 | |
| | | | |
| Activity 4.1 | ļ | Activity 4.1 | |
| | 1 l | - | |
| Unique discovery | | Unique discovery | |
| | | | |
| Artist who used a camera obscura to | | Used a camera obscura to create the | |
| create some of his paintings. | | earliest surviving photograph. | |
| croate some or no pointings. | | concerenting procegraph. | |
| | | | |
| Activity 4.1 | | Activity 4.1 | |

| Experimenter William Henry Fox Talbot | Experimenter James Clark Maxwell | | | |
|--|--|--|--|--|
| Activity 4.1 | Activity 4.1 | | | |
| | | | | |
| When | When | | | |
| c1833 | 1861 | | | |
| Activity 4.1 | Activity 4.1 | | | |
| | | | | |
| Unique discovery | Unique discovery | | | |
| Used a camera obscura which gave him the idea for his method of photography. | Demonstrated that electric and magnetic fields travel through space as waves moving at the speed of light and demonstrated the first colour photograph. | | | |
| Activity 4.1 | Activity 4.1 | | | |

| 1 | c7 <i>50</i> BCE | 2 | 37 - 68 |
|----|------------------|----|-------------|
| 3 | 810 - 887 | 4 | 965 - 1040 |
| 5 | 1632 - 1723 | 6 | 1570 - 1619 |
| 7 | 1610 | 8 | 1668 |
| 9 | c1740 | 10 | c1826 |
| 11 | c1833 | 12 | 1861 |

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