

# WJEC England GCSE Physics

## 6.3 - Lenses

### Flashcards

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What wave phenomenon is used by lenses to form an image?



What wave phenomenon is used by lenses to form an image?

Refraction



What two properties help determine the power of a lens?



What two properties help determine the power of a lens?

- The focal length
- The shape of the lens



Does a shorter focal length mean that a lens is more powerful or less powerful?



Does a shorter focal length mean that a lens is more powerful or less powerful?

More powerful.



Does shortening a lens make it more or less powerful?



Does shortening a lens make it more or less powerful?

The shorter the lens, the more powerful it is.



If light hits a boundary at 90 degrees to the surface, will the light refract?



If light hits a boundary at 90 degrees to the surface,  
will the light refract?

No, it will pass through the material  
unaffected.



What is meant by the focal length of a lens?



What is meant by the focal length of a lens?

The distance from the lens to the principal focus.



What is the difference between the image produced by a convex and a concave lens?



What is the difference between the image produced by a convex and a concave lens?

- Convex lenses can produce real or virtual images.
- Concave lenses can only produce virtual images.



# Why does magnification not have a unit?



## Why does magnification not have a unit?

- It is the ratio between image height and object height.
  - Ratios do not have units.



# How does a convex lens form an image?



# How does a convex lens form an image?

Parallel rays of light are refracted and brought together at a point known as the principal focus.



What symbol is used to represent a convex lens in a ray diagram?



What symbol is used to represent a convex lens in a ray diagram?



What symbol is used to represent a concave lens in a ray diagram?



What symbol is used to represent a concave lens in a ray diagram?

