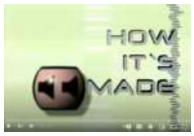
Reflection & Curves

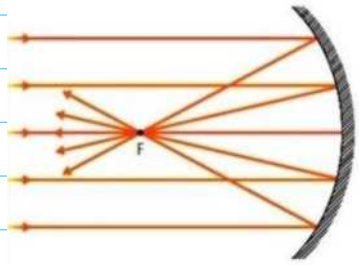


How it's made: Mirrors

https://youtu.be/u03S1Nmslw4?si=ylNiPCMO8eVqFRtV

Concave Mirrors

→ has surface that curves inward like a bowl (or a cave)



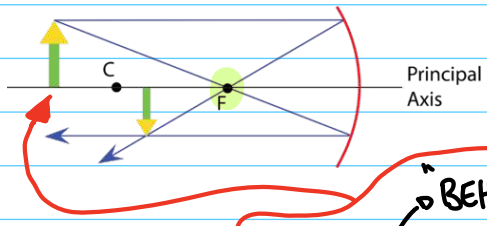
"converging" mirror

→ obeys law of reflection but when parallel light rays reach surface, they all strike @ different points and go in different directions → but head toward common point

→ Focal Point

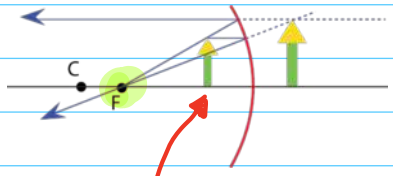
Images with Concave Mirrors

- images formed w/ concave mirrors depend on the distance between focal point and the object



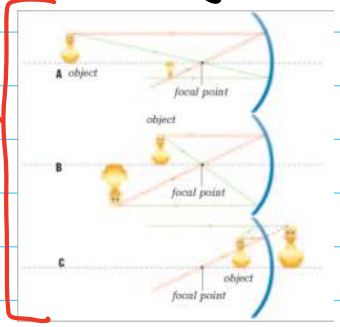
"behind"

If object is far away from focal point → image will be upside down & smaller



If object is between focal point & mirror → image will be right side up & enlarged.

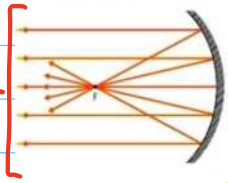
The closer the object gets to the focal point, the larger the image gets.



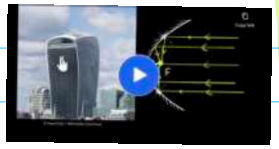
Putting light bulb @ Focal point

→ bulb sends rays in all directions

But, reversing the rays here... shows light would leave mirror as parallel rays



Ex: flashlight & headlights

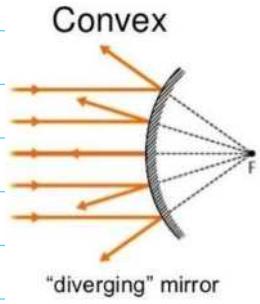


https://youtu.be/7p0_YK7hQ04?si=Fj-WaE8aFSeuaOgN

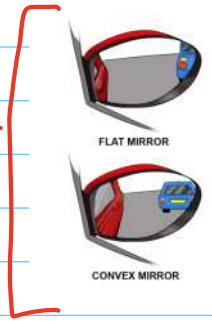
Khan Academy: Concave Mirrors

Convex Mirrors

→ HAS SURFACE CURVED OUTWARDS... DOES OPPOSITE of CONCAVE
→ INSTEAD of COLLECTING LIGHT to FOCAL POINT, it SPREADS it OUT.



→ Looking in CONVEX MIRROR... IMAGE APPEARS SMALLER THAN IT SHOULD BE.
→ CAR REARVIEW MIRRORS
WHY?



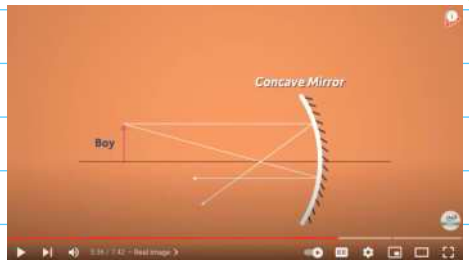


KHAN ACADEMY: CONVEX MIRRORS → https://youtu.be/4sZZYklwgqg?si=t9nsq8MnDISAfNjt



VIDEO DEMO: LIGHT REFLECTED off CONCAVE VS. CONVEX MIRROR

https://youtu.be/sMDUOkCqCmA?si=79BQ6RJw5Po3m39E



REAL VS. VIRTUAL IMAGES: CONCAVE VS. CONVEX

https://youtu.be/EwBK_cXUTZI?si=XHaZmgw7tsqVp1z5

CONCEPT REVIEWS & DEMONSTRATIONS