

# REFRACTION AND LENSES

PAGES 110 TO 116

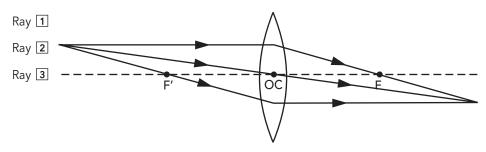
Complete this concept review handout and keep it as a record of what you have learned.

### **DEFINITIONS**

### CONVERGING LENS

# Focal point of a converging lens The focal point of a converging lens is

# Basic rays to determine the location of the image



- Ray 1 A ray that travels parallel to the principal axis is refracted \_\_\_\_\_\_
- Ray 2 A ray that travels straight through the optical centre of a lens \_\_\_\_\_
- Ray 3 A ray that travels straight through the secondary focal point is refracted \_\_\_\_\_

# CONVERGING LENS (CONT.)

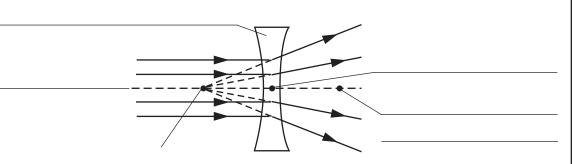
## Image produced by the lens

- The final image formed by a converging lens has different characteristics depending on

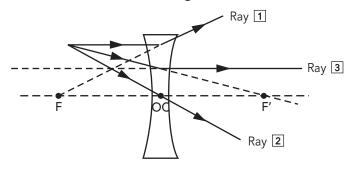
### DIVERGING LENS

### Focal point of a diverging lens

The focal point of a diverging lens is \_\_\_\_\_\_



Basic rays to determine the location of the image



- Ray 1 A ray running parallel to the principal axis is refracted, \_\_\_\_\_\_
- Ray 2 A ray passing through the optical centre of the lens \_\_\_\_\_
- Ray 3 A ray travelling toward the secondary focal point is refracted \_\_\_\_\_

# Image produced by the lens

- The images obtained by a diverging lens are always \_\_\_\_\_\_

Observatory/Guide 11071-B