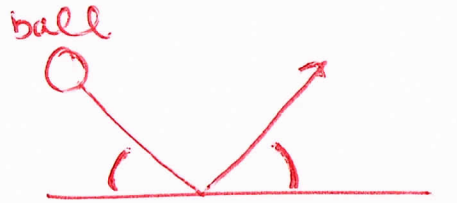
Challenge #1 - Mirror (flat, one beam)

reflection → the bouncing back of light off a surface



finish

LAW OF REFLECTION

$i = r$

reflected ray

normal

reflected angle

incident angle

incident ray

22° 23°

67°

flat mirror

68°

start

→ why is this a good material for reflection?

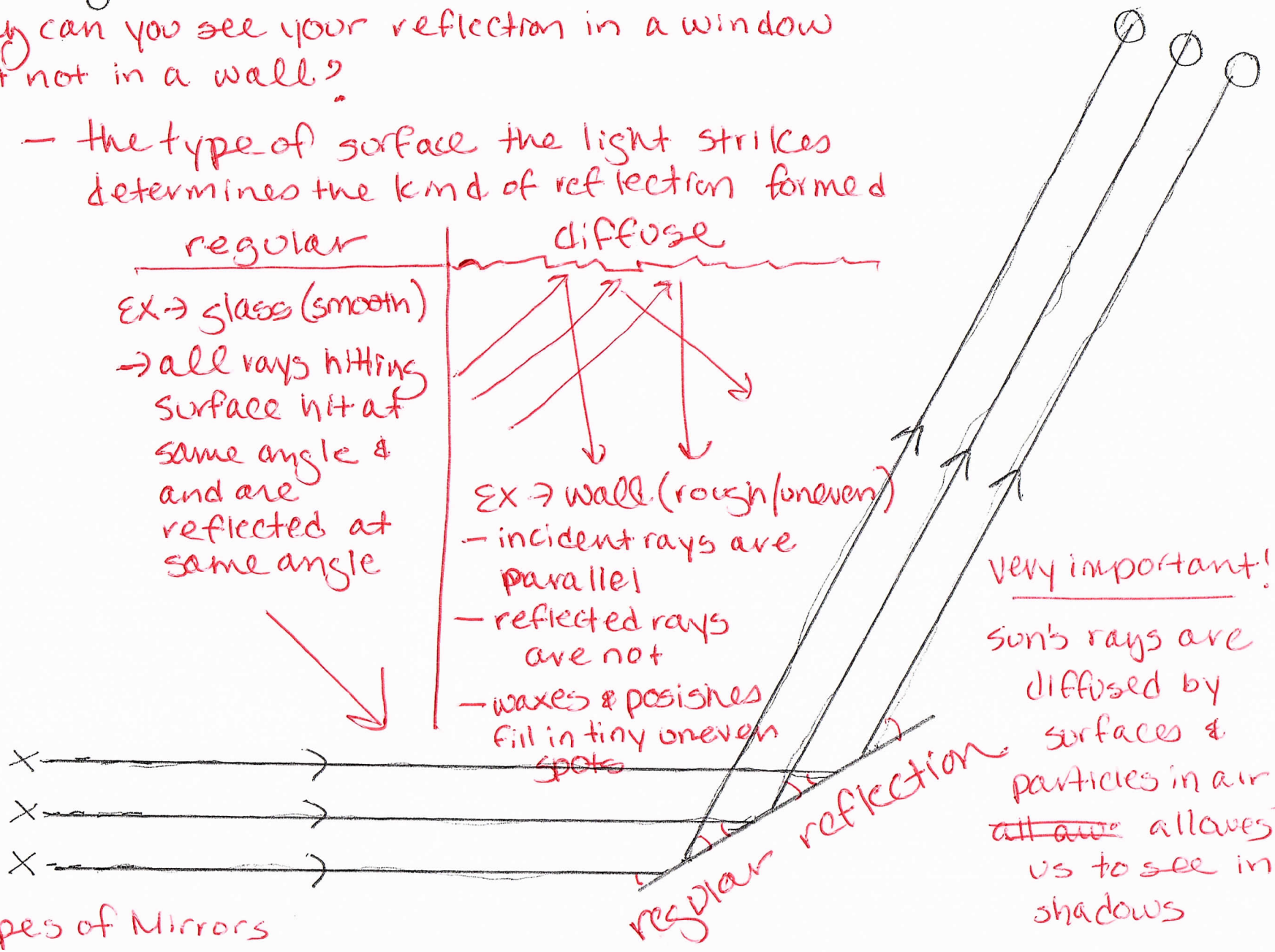
- smooth
- silver - backing
  - very reflective

Challenge #2 – Mirror (flat, 3-beam)

Why can you see your reflection in a window but not in a wall?

– the type of surface the light strikes determines the kind of reflection formed

regular	diffuse
Ex → glass (smooth)	Ex → wall (rough/uneven)
→ all rays hitting surface hit at same angle & and are reflected at same angle	– incident rays are parallel – reflected rays are not – waxes & posishes fill in tiny uneven spots



Very important!

Sun's rays are diffused by surfaces & particles in air, ~~all our~~ allows us to see in shadows

3 Types of Mirrors

PLANE (flat), CONCAVE (→), CONVEX (→ (