

## You don't know how mirrors work

<https://youtu.be/rYLzxcU6ROM>

### I True or false?

Circle the correct answer and justify if it's false

T/F **1** Mirrors flip images left-to-right.

False, they only reflect light.

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T/F **2** In the painting shown in the video, the girl is looking at herself in a mirror.

False, she's looking at us because the mirror is at an angle.

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T/F **3** The law of reflection can be explained by modeling light as a wave.

True.

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T/F **4** Each silver atom hit by a lightwave radiates its own light in a specific direction.

False, they emit light in all directions. It's called the HUYGENS-FRESNEL principle.

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T/F **5** The law of reflection can be explained by modeling light as a stream of photons.

True.

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T/F **6** Each individual photon follows the law of reflection to arrive to the detector.

False, a photon can take any path to the detector.

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T/F **7** Diffraction can be explained using light rays.

False, it's described by quantum mechanics using photons and probabilities.

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### II Translate into English

◇ Champ : field

◇ Perturbation : disturbance

◇ Onde de probabilité : probability wave

◇ Chemin : path

◇ Bord : edge