Name $\qquad$ Date $\qquad$
Physics
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Reflection/Refraction WS\#1
Mrs. Nadworny

## Wave Reflection

Directions: Read online textbook pages 526-527. The diagrams on this page show various properties of reflection. Use the diagrams to answer the questions.

1. The diagram below shows a light ray being reflected from a plane mirror.


What is the angle of incidence?
(A) $20 .{ }^{\circ}$
(B) $55^{\circ}$
(C) $35^{\circ}$
(D) $70 .^{\circ}$
2. The diagram below shows parallel rays of light incident on an irregular surface. Which phenomenon of light does the diagram illustrate?

(A) diffraction
(B) diffuse reflection
(C) regular reflection
(D) refraction
3. Use a protractor to measure the angle of incidence (i) on the diagram to the left.
4. On diagram to the left, use your protractor to correctly draw the reflected wave.
5. Label the normal, reflected wave and angle of reflection (r).
6. What could be a probable source for the incident rays in diagram C? Explain your reasoning.
7. On diagram C, use your protractor to correctly draw the normal for each incident ray.

8. Explain why the reflected rays are not parallel to one another.

