Name	Date
Teacher	Period

Projectiles Launched Horizontally Worksheet

- 1. A pelican flying along a horizontal path drops a fish from a height of 5.4 m while traveling at a speed of 5.0 m/s.
 - a. How far does the fish travel horizontally before it hits the water below?

b. What are the horizontal and vertical components of the velocity of the fish just before it hits the ground?

- 2. A cat chases a mouse across a 1.0 m high table. The mouse steps out of the way, and the cat slides off the table at a speed of 5.0 m/s.
 - a. How long will it take the cat to hit the floor?

b. How far from the base of the table will the cat land?

- 3. A rescue plane drops a package to a stranded party of explorers. The plane is traveling horizontally at a velocity of 100.0 m/s at a height of 50.0 m above the ground.
 - a. How long will it take for the package to hit the ground?

b. What horizontal distance does the package travel before hitting the ground?

c. What are the final horizontal and vertical velocities of the package just before it hits the ground?

- 4. During a thunderstorm, a tornado lifts a car to a height of 125 m above the ground. Increasing in strength, the tornado flings the car horizontally with an initial speed of 90 m/s.
 - a. How long does the car take to reach the ground?

b. How far horizontally does the car travel before hitting the ground?