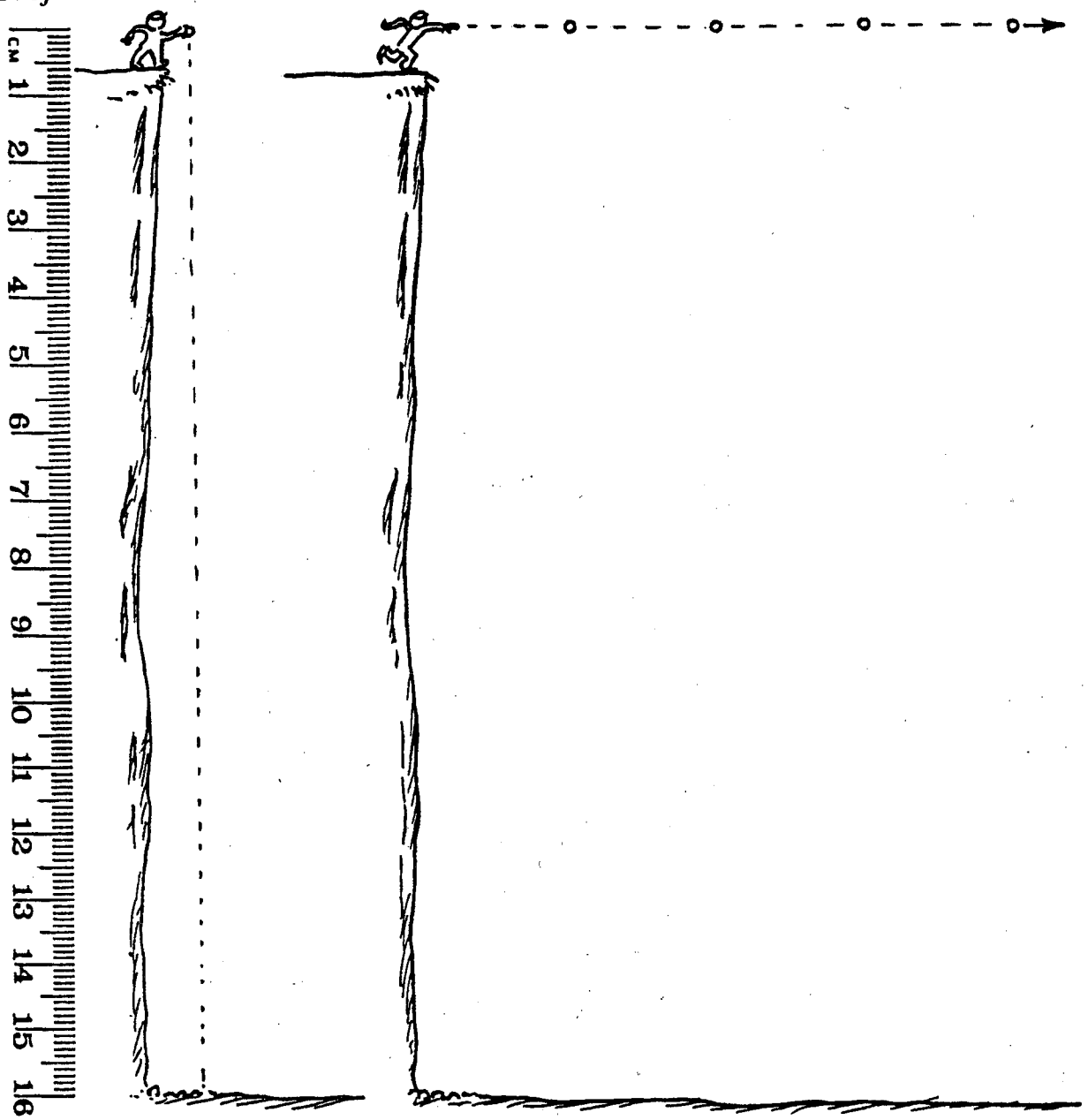
Name Period Date

Concept-Development Practice Page 3-1

Projectile Motion



1. Above left: Use the scale 1 cm: 5 m and draw the positions of the dropped ball at 1-second intervals. Neglect air drag and assume $g = 10\ m/s^2$. Estimate the number of seconds the ball is in the air.

   _____ seconds.

2. Above right: The four positions of the thrown ball with *no gravity* are at 1-second intervals. At 1 cm: 5 m, carefully draw the positions of the ball *with* gravity. Neglect air drag and assume $g = 10\ m/s^2$. Connect your positions with a smooth curve to show the path of the ball. How is the motion in the vertical direction affected by motion in the horizontal direction?

   _____

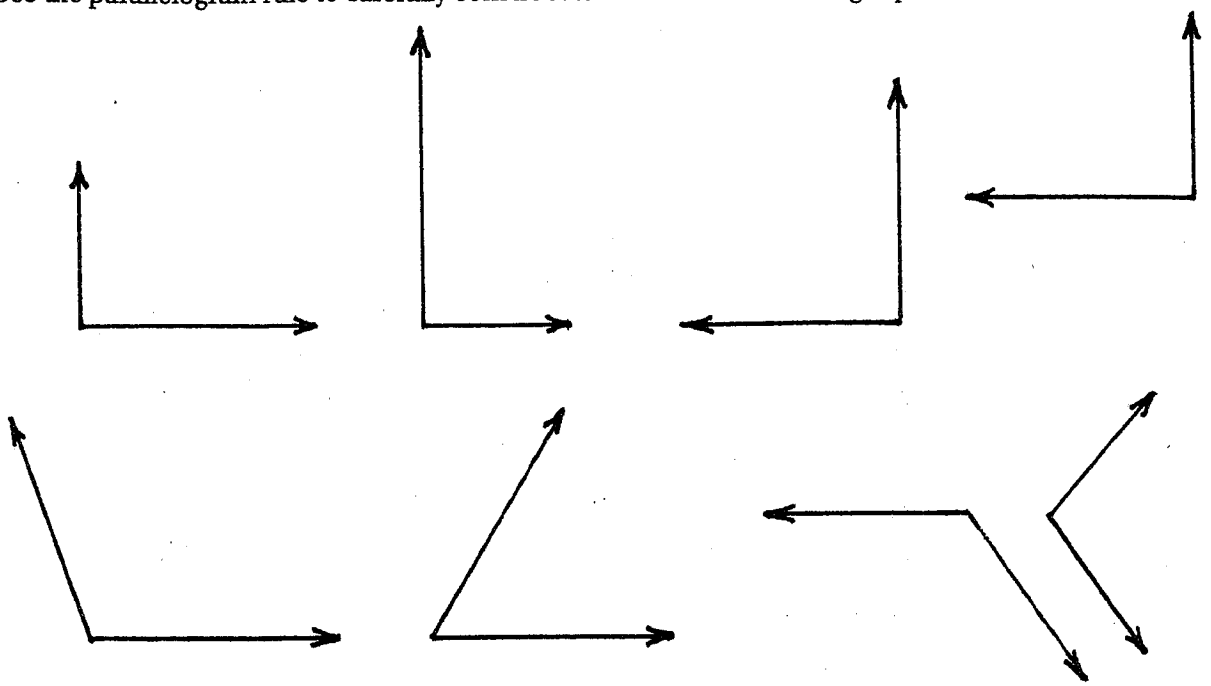
Conceptual PHYSICS

Name Period Date

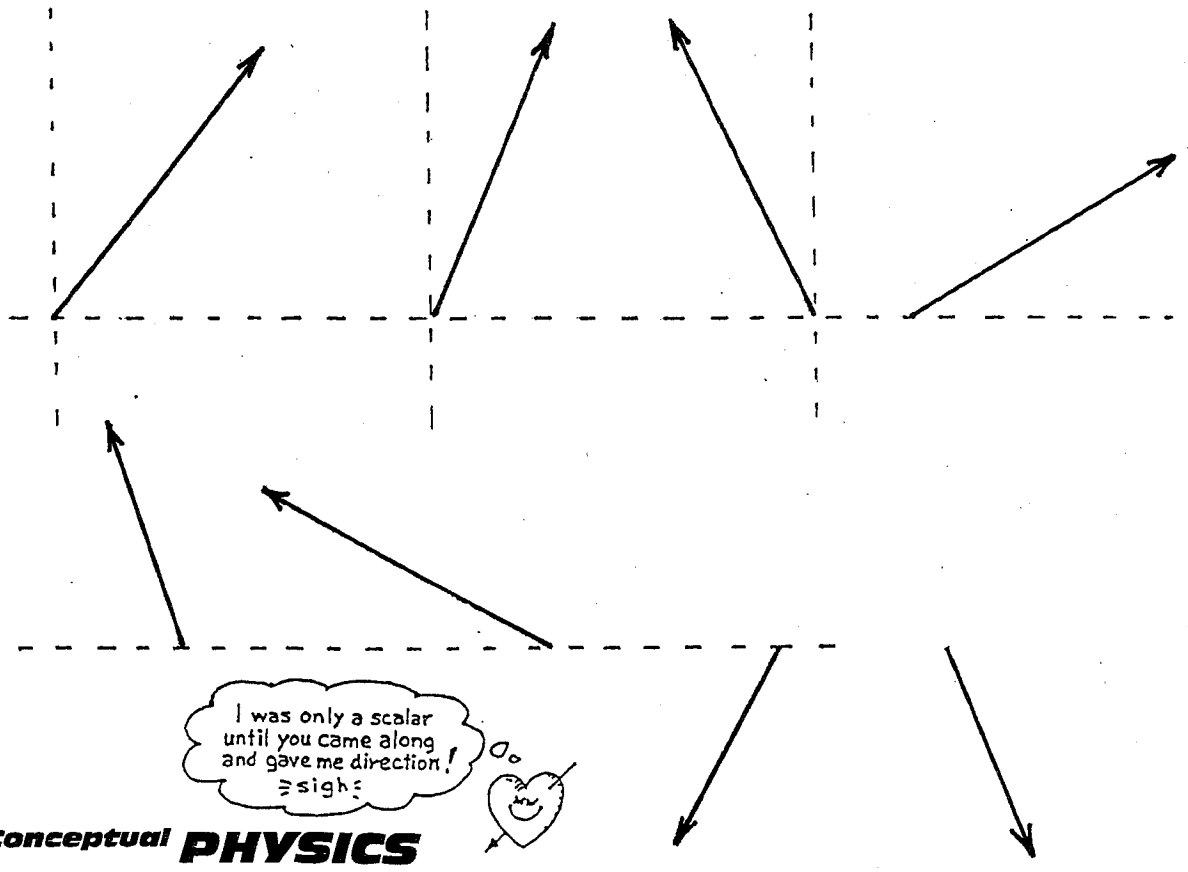
Concept-Development Practice Page **3-2**

Vectors

Use the parallelogram rule to carefully construct the resultants for the eight pairs of vectors.



Carefully construct the vertical and horizontal components of the eight vectors.



Conceptual PHYSICS