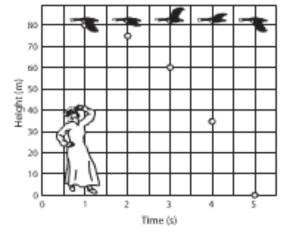
## **Notes: Chapter 1, Lesson 1 Describing Motion,** pages 4-7

An object is in motion if its position relative to...

<b>Reference Point</b> : a place or object determine if something is m_	_	to
Good reference points	VS	Poor reference points
<b>Relative motion</b> is dependent	t on a r	point.
<b>Measuring Distances</b> (Figure 2)	, page 7)	
International System of Units (S)	I) Système Int	ernational
Distance: the path between ]	points	
SI unit for length = 1 m	()	
The units we use to measure wit	th depends on	the s of the d

Relative size	Unit	Prefix	In relation to SI	Equivalent to SI
Small	cm	centi	One hundredth = 1/	1 m = cm
Smaller	mm	Milli	One thousandth =1/	1m = mm
Longer	km	Kilo	One thousand =	m = 1 km



- 1. From the perspective of the bird, what path does the dropped ball take, a straight line or curve? Why?
- 2. From the perspective of the girl, what path does the dropped ball take, a straight line or curve? Why?
- 3. What is the distance that the ball drops?

4. How much time does it take for the ball to fall to the ground?

5. What is the average speed of the falling ball?

1.2	Speed	and	Veloci	ty,	page	8-
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Speed: d\_\_\_\_\_ an object moves per unit of t\_\_\_\_\_ Equation: Speed = D\_\_\_\_\_ / T\_\_\_\_\_

The units = "how distance is measured" "per" "how time is measured"

## **Notes: Chapter 1, Lesson 1 Describing Motion,** pages 4-7

An object is in motion if its position relative to "your chair" changes

**Reference Point**: a place or object used for comparison to determine if something is moving.

<u>Good reference points</u>

VS

Poor reference points

**Relative motion** is dependent on a reference point. *The motion is "relative" to the reference point* 

**Measuring Distances** (Figure 2, page 7)

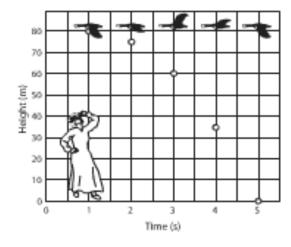
International System of Units (SI) Système International

Distance: the path between 2 points

SI unit for length = 1 meter (m)

The units we use to measure with depends on the size of the distances.

Relative size	Unit	Prefix	In relation to SI	Equivalent to SI
Small	cm	centi	One hundredth = 1/100	1 m = 100 cm
Smaller	mm	Milli	One thousandth =1/1,000	1m = 1,000 mm
Longer	km	Kilo	One thousand = 1,000	1,000m = 1 km



- 1. From the perspective of the bird, what path does the dropped ball take, a straight line or curve? Why?
- 2. From the perspective of the girl, what path does the dropped ball take, a straight line or curve? Why?
- 3. What is the distance that the ball drops?
- 4. How much time does it take for the ball to fall to the ground?
- 5. What is the average speed of the falling ball?

## 1.2 Speed and Velocity, page 8-

Speed: distance an object moves per unit of time

Equation: Speed = Distance / Time

The units = how distance is measured "per" how time is measured