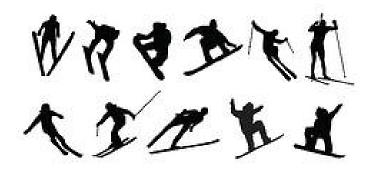


| Name: | Date: |  |
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## **Hitting the Slopes**



- 1. What type of potential energy do skiers take advantage of?
- 2. Draw a diagram of one of the events from the video. Label the locations of the athlete where
  - a. the greatest amount of potential energy is shown;
  - b. the least amount of potential energy is shown; and
  - c. an equal amount of potential and kinetic energy are shown.

| Labeled Diagram |
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| 3. | As the skiers | move down | the mountain, | their potential | energy is | converted in | nto what? |
|----|---------------|-----------|---------------|-----------------|-----------|--------------|-----------|
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| 4. | As the skiers travel down the slope, a portion of their total energy is lost. This means that |
|----|---|
|    | when they perform their tricks, they will never go as high as they were when they first       |
|    | pushed off from the gate. Describe how this energy is lost.                                   |

- 5. In the ski jump, all skiers launch from the same location. What would cause them to have different amounts of potential energy?
- 6. Draw a diagram giving a skier an unfair advantage over the others. Include a description with your diagram.

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