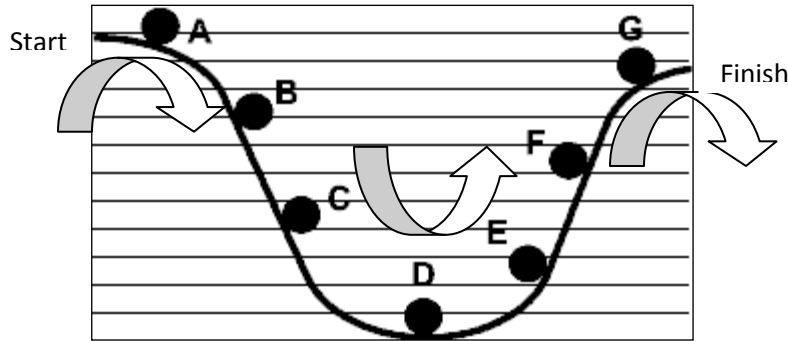




Kinetic VS Potential Energy Practice

Part 1: This graph shows a ball rolling from A to G.



1. Which letter shows the ball when it has the maximum kinetic energy? _____
 2. Which letter shows the ball when it has the maximum potential energy? _____
 3. Which letter shows the ball when it has the least potential energy? _____
 4. Which letter shows the ball when it has the least kinetic energy? _____
 5. Which letter shows the ball when it has just a little more kinetic energy than A? _____
 6. Which letter shows the ball when it has just a little more potential energy than letter C? _____
 7. Which letter shows the ball when it has just a little less potential energy than letter F? _____
 8. Which letter shows the ball when it has just a little more kinetic energy than letter G? _____
 9. Which letter shows the ball when it has just a little less kinetic energy than letter D? _____
 10. Which letter shows the ball when it has just a little less potential energy than letter C? _____
11. Which sequence correctly shows a *resulting increase in potential energy*?

| | |
|---------------|---------------|
| A. C, D, E, F | B. B, F, E, C |
| C. D, E, B, F | D. A, G, F, C |
 12. Which sequence correctly shows a *resulting increase in kinetic energy*?

| | |
|---------------|---------------|
| A. E, F, B, G | B. B, F, E, C |
| C. D, E, B, F | D. A, B, C, D |
 13. Which sequence correctly shows a *resulting decrease in kinetic energy*?

| | |
|---------------|---------------|
| A. E, F, B, G | B. B, F, E, C |
| C. D, E, F, G | D. A, G, F, C |
 14. Which sequence correctly shows a *resulting decrease in potential energy*?

| | |
|---------------|---------------|
| A. E, F, B, G | B. A, B, C, D |
| C. D, E, B, F | D. A, G, F, C |

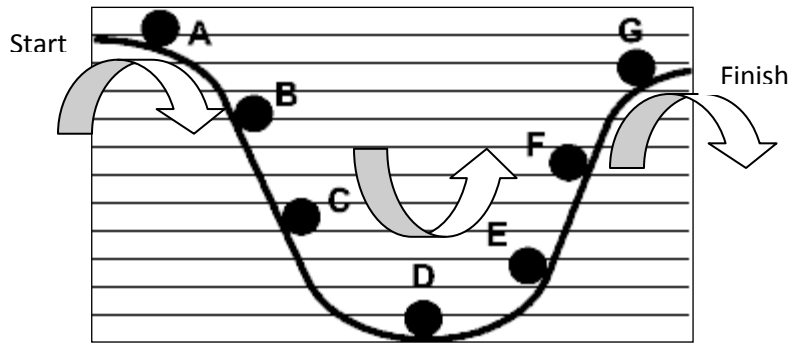
Part 2: Determine whether the objects in the problems have kinetic or potential energy.

1. You serve a volleyball with a mass of 2.1 kg. The ball leaves your hand with a speed of 30 m/s. The ball has _____ energy.
2. A baby carriage is sitting at the top of a hill that is 21 m high. The carriage with the baby weighs 12 N. The carriage has _____ energy.
3. A car is traveling with a velocity of 40 m/s and has a mass of 1120 kg. The car has _____ energy.
4. A cinder block is sitting on a platform 20 m high. It weighs 79 N. The block has _____ energy.
5. There is a bell at the top of a tower that is 45 m high. The bell weighs 190 N. The bell has _____ energy.
6. A roller coaster is at the top of a 72 m hill and weighs 966 N. The coaster (at this moment) has _____ energy.



Kinetic VS Potential Energy Practice

Part 1: This graph shows a ball rolling from A to G.



1. Which letter shows the ball when it has the maximum kinetic energy? D
2. Which letter shows the ball when it has the maximum potential energy? A
3. Which letter shows the ball when it has the least potential energy? D
4. Which letter shows the ball when it has the least kinetic energy? A
5. Which letter shows the ball when it has just a little more kinetic energy than A? G
6. Which letter shows the ball when it has just a little more potential energy than letter C? F
7. Which letter shows the ball when it has just a little less potential energy than letter F? C
8. Which letter shows the ball when it has just a little more kinetic energy than letter G? B
9. Which letter shows the ball when it has just a little less kinetic energy than letter D? E
10. Which letter shows the ball when it has just a little less potential energy than letter C? E
11. Which sequence correctly shows a *resulting increase in potential energy*?

| | |
|----------------------|---------------|
| <u>A.</u> C, D, E, F | B. B, F, E, C |
| C. D, E, B, F | D. A, G, F, C |
12. Which sequence correctly shows a *resulting increase in kinetic energy*?

| | |
|---------------|----------------------|
| A. E, F, B, G | B. B, F, E, C |
| C. D, E, B, F | <u>D.</u> A, B, C, D |
13. Which sequence correctly shows a *resulting decrease in kinetic energy*?

| | |
|----------------------|---------------|
| <u>C.</u> D, E, F, G | B. B, F, E, C |
| A. E, F, B, G | D. A, G, F, C |
14. Which sequence correctly shows a *resulting decrease in potential energy*?

| | |
|---------------|----------------------|
| A. E, F, B, G | <u>B.</u> A, B, C, D |
| C. D, E, B, F | D. A, G, F, C |

Part 2: Determine whether the objects in the problems have kinetic or potential energy.

1. You serve a volleyball with a mass of 2.1 kg. The ball leaves your hand with a speed of 30 m/s. The ball has **KINETIC** energy.
2. A baby carriage is sitting at the top of a hill that is 21 m high. The carriage with the baby weighs 12 N. The carriage has **POTENTIAL** energy.
3. A car is traveling with a velocity of 40 m/s and has a mass of 1120 kg. The car has **KINETIC** energy.
4. A cinder block is sitting on a platform 20 m high. It weighs 79 N. The block has **POTENTIAL** energy.
5. There is a bell at the top of a tower that is 45 m high. The bell weighs 190 N. The bell has **POTENTIAL** energy.
6. A roller coaster is at the top of a 72 m hill and weighs 966 N. The coaster (at this moment) has **POTENTIAL** energy.