

# Grade 8 Midterm Assessment Review

These Key Concepts can be found at the beginning of each section in your textbook.

## PHYSICAL SCIENCE

1. When is an object in motion? **Chapter 1.1 – page(s) 7**
2. How do you know an object's speed and velocity? **Chapter 1.1 – page(s) 10-12**
3. How can you graph motion? **Chapter 1.1 – page(s) 14-15**
4. What kind of motion does acceleration refer to? **Chapter 1.3 – page(s) 22-23**
5. How is acceleration calculated? **Chapter 1.3 – page(s) 24-25**
6. What graphs can be used to analyze the motion of an accelerating object? **Chapter 1.3 – page(s) 26-27**
7. How is a force described? **Chapter 2.1 – page(s) 36-37**
8. How are unbalanced and balanced forces related to an object's motion? **Chapter 2.1 – page(s) 37-39**
9. What factors affect the gravitational force between two objects? **Chapter 2.2 – page(s) 46-47**
10. Why do objects accelerate during free fall? **Chapter 2.2 – page(s) 48-50**
11. What is Newton's first law of motion? **Chapter 2.3 – page(s) 51-52**
12. What is Newton's second law of motion? **Chapter 2.3 – page(s) 52-54**
13. What is Newton's third law of motion? **Chapter 2.4 – page(s) 55-57**
14. What keeps a satellite in orbit? **Chapter 2.5 – page(s) 65-67**
15. When is work done on an object? **Chapter 4.1 – page(s) 108-110**
16. How do you determine the work done on an object? **Chapter 4.1 – page(s) 108-110**
17. What is power? **Chapter 4.1 – page(s) 111**
18. How are energy, work, and power related? **Chapter 5.1 – page(s) 147**
19. What are the two basic kinds of energy? **Chapter 5.1 – page(s) 147-150**
20. What are some forms of energy associated with the particles that make up objects? **Chapter 5.2 – page(s) 153-155**
21. How are different forms of energy related? **Chapter 5.3 – page(s) 158**
22. What is a common energy transformation? **Chapter 5.3 – page(s) 158-161**
23. What is the law of conservation of energy? **Chapter 5.3 – page(s) 162-163**

## Vocabulary

[motion](#)

[reference point](#)

[International System of Units](#)

[meter](#)

[speed](#)

[average speed](#)

[instantaneous speed](#)

[velocity](#)

[slope](#)

[acceleration](#)

[force](#)

[newton](#)

[net force](#)

[unbalanced forces](#)

[balanced forces](#)

[friction](#)

[static friction](#)

[sliding friction](#)

[rolling friction](#)

[fluid friction](#)

[gravity](#)

[mass](#)

[weight](#)

[free fall](#)

[air resistance](#)

[terminal velocity](#)

[projectile](#)

[inertia](#)

[momentum](#)

[law of conservation of momentum](#)

[satellite](#)

[centripetal force](#)

[work](#)

[joule](#)

[power](#)

[energy](#)

[kinetic energy](#)

[potential energy](#)

[gravitational potential energy](#)

[elastic potential energy](#)

[mechanical energy](#)

[thermal energy](#)

[electrical energy](#)

[chemical energy](#)

[nuclear energy](#)

[electromagnetic energy](#)

[energy transformation](#)

[law of conservation of energy](#)

[matter](#)

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