1. What is the best way to model a real-world situation?

a. By using a mathematical model
b. By using a physical model
c. By using a computer model
d. By using an experimental model

2. What is the main advantage of using a mathematical model?

a. It is easy to use
b. It is more accurate than other types of models
c. It can be used to predict future behavior
d. All of the above

3. What is the main disadvantage of using a mathematical model?

a. It is difficult to use
b. It is less accurate than other types of models
c. It can only be used to predict future behavior
d. All of the above

4. Which of the following is an example of a mathematical model?

a. A graph of a function
b. A set of linear equations
c. A system of differential equations
d. All of the above

5. What is the main advantage of using a physical model?

a. It is easy to use
b. It is more accurate than other types of models
c. It can be used to predict future behavior
d. All of the above

6. What is the main disadvantage of using a physical model?

a. It is difficult to use
b. It is less accurate than other types of models
c. It can only be used to predict future behavior
d. All of the above

7. Which of the following is an example of a physical model?

a. A graph of a function
b. A set of linear equations
c. A system of differential equations
d. All of the above

8. What is the main advantage of using a computer model?

a. It is easy to use
b. It is more accurate than other types of models
c. It can be used to predict future behavior
d. All of the above

9. What is the main disadvantage of using a computer model?

a. It is difficult to use
b. It is less accurate than other types of models
c. It can only be used to predict future behavior
d. All of the above

10. Which of the following is an example of a computer model?

a. A graph of a function
b. A set of linear equations
c. A system of differential equations
d. All of the above

11. What is the main advantage of using an experimental model?

a. It is easy to use
b. It is more accurate than other types of models
c. It can be used to predict future behavior
d. All of the above

12. What is the main disadvantage of using an experimental model?

a. It is difficult to use
b. It is less accurate than other types of models
c. It can only be used to predict future behavior
d. All of the above

13. Which of the following is an example of an experimental model?

a. A graph of a function
b. A set of linear equations
c. A system of differential equations
d. All of the above

14. What is the best way to choose a model?

a. By using a mathematical model
b. By using a physical model
c. By using a computer model
d. By using an experimental model

15. What is the best way to test a model?

a. By using a mathematical model
b. By using a physical model
c. By using a computer model
d. By using an experimental model

16. What is the best way to improve a model?

a. By using a mathematical model
b. By using a physical model
c. By using a computer model
d. By using an experimental model

17. What is the best way to verify a model?

a. By using a mathematical model
b. By using a physical model

c. By using a computer model
d. By using an experimental model

18. What is the best way to validate a model?

a. By using a mathematical model
b. By using a physical model
c. By using a computer model
d. By using an experimental model

19. What is the best way to use a model?

a. By using a mathematical model
b. By using a physical model
c. By using a computer model
d. By using an experimental model

20. What is the best way to interpret a model?

a. By using a mathematical model
b. By using a physical model
c. By using a computer model
d. By using an experimental model

Answer Key: 1-d, 2-d, 3-d, 4-d, 5-d, 6-d, 7-d, 8-d, 9-d, 10-d, 11-d, 12-d, 13-d, 14-d, 15-d, 16-d, 17-d, 18-d, 19-d, 20-d