Name_____ Class_____ Date_____

Even MORE IDD Practice!

Scenario #1: Kenny loves skateboarding and is entering a competition in a few months. He is curious about how the type of wheel affects his ability to perform a difficult trick. He decides to test out three different types of wheels. He starts with his current wheels. Then he changes the wheels to have more grip (friction) on them. The final wheels he tries has the smoothest surface and therefore the least amount of friction. He tries the same trick 10 times with each wheel type. He also makes sure to use the same board and perform the trick in the same location. To be extra scientific he even makes sure to have the same weather conditions. He has a friend record the number of times he lands the trick perfectly.

Testable Question:			
Independent Variable:			
Levels			
Trials			
Dependent Variable:			
Constant/Controlled Variable:			

Scenario #2: Isabella is studying for a big test she has coming up. She is curious about how the method of studying affects the grade she might earn. She decides to test out three different types of study methods on her friends. All of her friends were given the same Math vocabulary and problems to learn and she made sure all of them had never seen this information before. She asked friend #1 to use flash cards to study. Friend #2 used a computer game to study. Friend #3 re-read the notes. Isabella gave them the same test to take and recorded the number of correct answers.

Testable Question:			
Independent Variable:			
Levels			
Trials			
Dependent Variable:			
Constant/Controlled Variable:			

Name_____ Class_____ Date_____

Scenario #3: Shawn enjoys playing baseball. He has a big game coming up and he wants to make sure to hit a home run when he is up at bat. His baseball league lets the players choose the type of bat they use during games. Sean decides to test out 3 different types of bat. He will measure how far he hits the ball with each type of bat: wooden, aluminum, and composite. He will use the same type of ball, and try his best to hit the ball with the same force. He will hit 15 baseballs with each bat.

Testable Question:			
Independent Variable:			
Levels			
Trials			
Dependent Variable:			
Constant/Controlled Variable:			

Scenario #4: Ms. Salvaggio just had birthday and she is concerned about the decline of her memory. In order to determine whether age has an affect on memory, she decides to conduct an experiment. She asks her family members to participate in her experiment. She gives them a lis of number to memorize for 1 minute. She then gives them 10 seconds to repeat back the numbers in the correct order. She asks her grandmother, her sister who is 5 years younger than her, and her cousin who is 7 to participate. She records the accuracy with which they repeat the words to her.

Testable Question:			
Independent Variable:			
Levels			
Trials			
Dependent Variable:			
Constant/Controlled Variable:			

Name_____ Class_____ Date_____

Even MORE IDD Practice!

Scenario #1: Kenny loves skateboarding and is entering a competition in a few months. He is curious about how the type of wheel affects his ability to perform a difficult trick. He decides to test out three different types of wheels. He starts with his current wheels. Then he changes the wheels to have more grip (friction) on them. The final wheels he tries has the smoothest surface and therefore the least amount of friction. He tries the same trick 10 times with each wheel type. He also makes sure to use the same board and perform the trick in the same location. To be extra scientific he even makes sure to have the same weather conditions. He has a friend record the number of times he lands the trick perfectly.

Testable Question: **How does the type of wheel affect his ability to land a trick?**			
Independent Variable: **CHANGE the type of wheel**			
Levels	**current**	**more friction**	**smooth (less friction)**
Trials	**10**	**10**	**10**
Dependent Variable: **COUNT the number of times he landed a trick**			
Constant/Controlled Variable: **same board, same location, same weather conditions**			

Scenario #2: Isabella is studying for a big test she has coming up. She is curious about how the method of studying affects the grade she might earn. She decides to test out three different types of study methods on her friends. All of her friends were given the same Math vocabulary and problems to learn and she made sure all of them had never seen this information before. She asked friend #1 to use flash cards to study. Friend #2 used a computer game to study. Friend #3 re-read the notes. Isabella gave them the same test to take and recorded the number of correct answers.

Testable Question: **What is the effect of the type of study method on the number of correct answers?**			
Independent Variable: **CHANGE the type of study method**			
Levels	**flash cards**	**computer game**	**re-reading notes**
Trials	**1**	**1**	**1**
Dependent Variable: **COUNT the number of correct answers**			
Constant/Controlled Variable: **SAME math vocabulary, same test**			

Name_____ Class_____ Date_____

Scenario #3: Shawn enjoys playing baseball. He has a big game coming up and he wants to make sure to hit a home run when he is up at bat. His baseball league lets the players choose the type of bat they use during games. Sean decides to test out 3 different types of bat. He will measure how far he hits the ball with each type of bat: wooden, aluminum, and composite. He will use the same type of ball, and try his best to hit the ball with the same force. He will hit 15 baseballs with each bat.

Testable Question: **What is the effect of the type of bat on how far he is able to hit the baseball?**			
Independent Variable: **CHANGE the type of bat**			
Levels	**aluminum**	**composite**	**wood**
Trials	**15**	**15**	**15**
Dependent Variable: **MEASURE how far he is able to hit the baseball**			
Constant/Controlled Variable: **SAME type of ball**			

Scenario #4: Ms. Salvaggio just had birthday and she is concerned about the decline of her memory. In order to determine whether age has an affect on memory, she decides to conduct an experiment. She asks her family members to participate in her experiment. She gives them a list of number to memorize for 1 minute. She then gives them 10 seconds to repeat back the numbers in the correct order. She asks her grandmother, her sister who is 5 years younger than her, and her cousin who is 7 to participate. She records the accuracy with which they repeat the ~~words~~ numbers to her.

Testable Question: **How does the age of the participants affect the accuracy with which the numbers are repeated back?**			
Independent Variable: **CHANGE the age of the participants**			
Levels	**grandmother**	**sister**	**cousin**
Trials	**1**	**1**	**1**
Dependent Variable: **MEASURING the accuracy with which the numbers are repeated back**			
Constant/Controlled Variable: **SAME list of numbers**			

Name_____ Class_____ Date_____

Use this chart from our classroom to help you recognize the variables AND to help you write your answers in the boxes-the words CHANGE, MEASURE, and SAME can be used to start your answers! This may help you!