Articles- **PHYSICAL SYSTEMS**

Directions: Each student at your table will be given a different article to read. You will read your article and answer the questions on your worksheet. Then you will group up with someone else who has your same article. You will answer the questions from your group discussion. Then you will go back to your table and share your article with your table. Each student at the table will have a different article and a different worksheet.

YO-YO WIZARDS- Jan. 20, 2020 pgs. 16-19

1. Who is this article about?
2. Where is she from?
3. What does a yo-yoer do during a competition?

4. What do judges award points based on?
   a. b. c.

5. What science concept do these high-tech toys harness to spin faster and longer?

Yo-Yo Basics:

6. To make a yo-yo "sleep," Gallegos throws it toward the _____.
7. As the yo-yo leaves her hand, it has stored _____ energy because of its elevated position.
8. The force of _____ then pulls the yo-yo downward, turning potential energy in _____ energy, or energy of _____.
9. To "wake" up the yo-yo, she gives the string a quick tug. This creates _____ between the loop of string and the yo-yo. Friction is a force that _____ movement.

Tricked-Out Design:

10. What were yo-yos originally made of?
11. What are professional yo-yos made of?
12. Why are the edges of the yo-yo weighted?
13. To reduce friction, a modern yo-yo also contains a _____ _____.

Practice Makes Perfect:

14. Betty was the first female to win what competition?
15. What place did Betty win at the World Yo-Yo Contest held in Cleveland, Ohio?

EXPERT GROUP

Directions: You will find 2-3 other people that have your same article (green paper). As a group, you will discuss what you read and answer the following questions.

1. Describe where potential and kinetic energy are located in a Yo-Yo?

Potential:

Kinetic:

2. Describe the role of friction in a Yo-Yo?

TABLE GROUPS

Directions: Each person at your table read a different article. They will be asking you these questions. Be prepared to answer.

1. Describe how to make a yo-yo "sleep."
2. Describe how to "wake" the yo-yo back up.
3. Describe what a modern yo-yo is made of?

The table below has questions for you to ask the people at your table about the articles that they read. Ask them the questions and write down their answers.

Tower Power:

1. What is a castell?
2. What is the purpose of a castell?
3. Describe the process of building a castell.

The Dark Side of Light:

1. How do bats see at night? Explain this phenomenon.
2. Why is our brighter world creating problems for the bats?
3. Why are bats beneficial?

Are You Being Watched?:

1. How does facial recognition work?
2. How is facial recognition being used?
3. What are pros and cons of facial recognition?

   Pros-

   Cons-

CLASS DISCUSSION

These articles are a review of science concepts. Discuss the science concepts from these articles. What were they and how do they apply to the articles?