Fidget Spinner -Quiz

1. Why are we tasked with building a fidget spinnerin the first place?

   For the local toy store, which is looking for a new bestselling product that is both fun & educational

2. BESIDES being a fun toy...name at least one benefit of using of Fidget spinners:

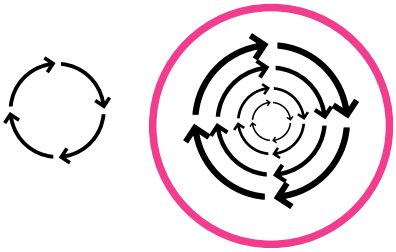
   Mental health, anxiety, focus, etc.

3. List 2 or 3 industries where you will find similar technology in as fidget spinners (aka: bearings)

   - Automotive, Aerospace, Medical, Machinery, Skateboard, etc.

4. Which has more angular momentum, a table spinner that weighs 1 lb or a tabletop spinner that weighs 5 lbs.?

5. Which has more angular momentum, a table spinner spinning 10 meters / second or 25 meters per second?



6. How does friction effect spinning / moving objects? Does lubrication like oil help at all?

   Friction builds up heat and slows the movement down...lubrication can minimize friction and help!!

Fidget – Activity Guide

Explain how bearings work in your own words:

Bearings are like tiny smooth balls or rollers inside wheels that help them spin easily and smoothly.

List a few observations about these pictures... why / how do you think this happened, how does it effect the performance, etc.

Bearings are corroded, creating more friction, they have not been oiled / lubricated

The dirt inside gets in the way of the balls spinning smoothly. Corrosion also happens from exposure to water

Which object do you think has more friction, and that would have a harder time sliding down the slope?