Name:

Super Spinners! (Teacher Version)

What's Torque?

Torque is the effort it takes to make something spin! Can you describe the torque seen in the following images?

- a) The force from pushing and the weight of the child makes the merry-go-round-ride spin
- b) The force put on the end of the wrench allows the worker to tighten the bolt.
- c) The force put on the handle of the top allows it to spin.

Name:

Talk About It!

1. What purpose do you think the handle has in getting the top to spin? The handle gives something to hold so that a person could apply a force and spin it.

2. Can you list some other situations where torque is useful? Opening a jar, going around a merry go round.

3. Describe how a teeter-totter is an example of torque. If the ground wasn't in the way, the teeter-totter could spin the same way as the other objects we've described: around a centre point.

Did You Know?

A torque (torc) is also a piece of jewellery made from metals strands that have been intertwined. This Name: Im age Sources:

W hat's Torque?

- 1. Wooden Spinning Tops: <u>http://www.woodenspinningtops.com/Home.html</u>
- 2. This Old House: http://www.thisoldhouse.com/toh/article/0,,1222593,00.html
- 3. Hope Stands: <u>http://samuelkee.com/2011/01/</u>

Terrific Torque:

- 1. Wikipedia: <u>http://en.wikipedia.org/wiki/File:Blank_cd.png</u>
- 2. Once Upon A Teacher: <u>http://onceuponateacher.blogspot.ca/2014/01/kindergarteners-use-their-magic-pencil.html</u>
- 3. Esko: http://blog.esko.com/category/packaging-materials/cardboard-packaging-2/
- 4. 4Vector: <u>http://4vector.com/free-vector/free-vector-vector-clip-art-scissors-clip-art-116113</u>
- 5. Vex Robotics: http://www.vexrobotics.com/275-1089.html
- 6. Second Law Media: <u>http://www.secondlawmedia.com/how-much-time-does-it-take-to-manage-a-ppc-campaign/</u>

Did You Know?

1. The History Blog: <u>http://www.thehistoryblog.com/archives/7977</u>

Test Your Top!

1. Yoola: <u>http://www.yooladesign.com/2013/12/spin-your-dreidel-your-spinning-top-your-kreisels-collecting-over-the-world/</u>

Pay for a Better Spin:

1.