**Activity 1 Different types of Bearing Activity**

**Please watch video 1, 2 and 3 and then answer the questions below.**

Please watch the video on the induction heater and then answer the questions below.

1. What are the two different types of rolling element bearings?
2. What are the four typical components of a rolling contact bearing?
3. What the main types of rolling elements and what are the materials made from?
4. What is another name for the retainer and what function does it perform?
5. What are the two main types of protective devices that are used on a bearing? Where are these attached to the bearing and how do the two devices work?
6. Where are seals normally used and why?
7. What is a radial load and what is an axial load?
8. What is the difference between a shallow groove bearing and a deep ball groove ball bearing?
9. What is the common name for a spherical race ball bearing? Describe the design of the bearing and how it can accommodate misalignment.
10. Describe the design of an angular contact bearing. What type of loads can this bearing take and why can they be placed in pairs? As the surfaces that contact each other are specially machined to match so if one bearing fails do both pairs have to be replaced?