

## Section 2 Part A – Drill speed graph

### Student Instructions:

1. Enter the drill speed data into a spread-sheeting program such as Microsoft Excel
2. Generate a line graph showing Drill Diameter vs Speed
3. Take a screenshot of the graph
4. Paste your completed work below where indicated
5. Answer associated questions

### Drill Speed Data

Drill Diameter (mm)	Speed (RPM)
4	2250
6	1500
8	1125
10	900
12	750

Paste your line graph HERE

1. What do you notice about the speed as the diameter increases?
2. Estimate the speed used for a 20mm drill bit
3. Calculate the Drill Speed RPM used for a 20mm drill bit using the following formula where:  $x$  = drill bit size and  $y$  = Drill Speed RPM
  - $x = \underline{9000}$
  - $y$
4. What was the difference between the estimate and actual speed (if there is any)?