# Year 9 Objective List – Higher          HT6 – 2022-23

## Shape and Handling Data:

| Objective | Sparx Task | |
|---|---|---|
| Recap area and circumference of a circle (new to those in set 3 last year) | M169, M231 | |
| Calculate the volume of a right prism | M722 | |
| Calculate the surface area of a right prism | M661 | |
| Calculate the volume of a cylinder | M697 | |
| Calculate the surface area of a cylinder | M936 | |
| Calculate the volume of a sphere | U617 | |
| Change between metric units of area and volume | M728, M465 | |
| Problem solving with volume and surface area | U426 | |
| Work out the length of an arc | M280 | |
| Work out the area of a sector | M430 | |
| Problem solving with arc length and sector area | M280, M430 | |
| Construct enlargements using fractional scale factors | U519 | |
| Construct enlargements using negative scale factors | U134 | |
| Find modal class, class in which the median lies and mean from a grouped frequency table | U312 | |
| Compare distributions of mean, median, mode and range from grouped, continuous and discrete data | | |
| Interpret and calculate quartiles and interquartile range from a list | U642 | |
| Construct and complete boxplots | U879 | |
| Interpret boxplots | U837 | |

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|---|---|---|
| Compare boxplots | U507 | |
| Construct a cumulative frequency diagram | U182 | |