## Topic: Probability (chapter 14)

Prior learning:
Fractions
Decimals

| Learning sequences |  |  |  | Endpoints |
| :---: | :---: | :---: | :---: | :---: |
|  | Acquiring | On track | Extending |  |
| Main Learning Steps | - Understand how to write probability <br> - Use probability scale including worded probabilities <br> Find the probability of basic circumstances | Find experimental probabilities <br> Compare experimental and theoretical probabilities <br> - Complete probability worded questions | - Recognize and use set notation <br> - Draw and complete Venn Diagrams <br> - Draw and complete twoway tables | - To understand the basic of probability and find basic probabilities <br> - To calculate probability <br> - To find and use relative and experimental probabilities <br> - To represent sets with Venn Diagrams <br> - To complete and use set notation of Venn Diagrams (H) <br> - Complete two-way tables |
|  | Working towards | Advancing |  |  |
|  | - Calculate probability from a table <br> Calculate probability from given probabilities | Represent sets in Venn diagrams <br> Complete two-way tables |  |  |
| Assessments | - Check of understanding in <br> - Included in the end of yea | in class and homework ar assessment |  |  |


| Where will we use these ideas again: | Frequency Trees |
| :--- | :--- |
| Probabilities |  |
| Venn Diagrams |  |$\quad$ Probabilities Trees

## MATHS DEPARTMENT

## Topic: Averages and Data

Prior learning:
Timetables
Use of a calculator

Tally Charts Collecting Data
Frequency tables

| Learning sequences |  |  |  | Endpoints |
| :---: | :---: | :---: | :---: | :---: |
|  | Acquiring | On track | Extending |  |
| Main Learning Steps | - Understand and use a frequency table and tally charts <br> $\square$ Conduct and critique surveys and questionnaires <br> - Find the MMMR from data <br> Working towards <br> Find the MMMR when possible, from bar charts | Analyze pie charts <br> - Draw pie charts <br> Interpret information from <br> frequency tables <br> Advancing <br> Gean the mode, range and <br> mean a frequency <br> table (non-grouped) | Find the median from a non-grouped frequency table <br> Find the mean, mode and range from grouped frequency table | - To find the mode, median, mean and range from data <br> - To find the MMMR from bar charts when possible <br> - To draw and analyse pie charts <br> - To find the mode, mean and range from a frequency table (non-grouped) (H) <br> - To find mode, mean and range from a frequency table (grouped) (H) <br> - Find the median from a non-grouped frequency table (H) |
| Assessments | - Check of understanding in class and homework |  |  |  |


| Where will we use these ideas again: | Averages |
| :--- | :--- |
| MMMR from Grouped Data |  |
| Data representations |  |

## Topic: Angles and Construction (chapter 11 and 12)

Prior learning:
Using a compass
Using a protractor

Calculations
Inverse operations
Recall basic shapes

| Learning sequences |  |  |  | Endpoints |
| :---: | :---: | :---: | :---: | :---: |
|  | Acquiring | On track | Extending |  |
| Main Learning steps | ```- Use geometric notation to name shapes, angles, lines and points \\ - Name angles \\ - Draw angles \\ Measure angles``` | - Construct triangle with a protractor <br> Find a missing angle in a scalene triangle <br> - Find the missing angle in quadrilaterals | - Understand and apply the rule of angles in polygons <br> - Apply the knowledge of alternate and corresponding angles to identify angles in parallel lines <br> Find angles in parallel by applying appropriate rules | - To use geometric notation <br> - To name, draw and measure angles <br> - To recognise and name shapes <br> - To construct various triangles <br> - To find the missing angle on a line and round a point <br> - To find the missing angles in a triangle <br> - To find the missing angles in quadrilaterals <br> - To understand and apply the rule of angles in polygons ( H ) <br> - To apply knowledge of alternate, corresponding and other rules in parallel (H) |
|  | Working towards | Advancing |  |  |
|  | - Recognize and name shapes Find the missing angles on a line and round a point | Construct triangle with a compass - Find the missing angle in an isosceles and equilateral triangle $\square$ identify opposite angles |  |  |
| Assessments | - Check of understanding <br> - End of unit test | in class and homework |  |  |


| Where will we use these ideas again: | Angles in parallel |
| :--- | :--- |
| Construction <br> Interior and Exterior angles |  |

## Topic: Fractional Thinking (chapter 10)

Prior learning:
Understanding of fractions
Represent values of fractions

Use of calculator
4 operations

| Learning sequences |  |  |  | Endpoints |
| :---: | :---: | :---: | :---: | :---: |
|  | Acquiring | On track | Extending |  |
| Main Learning steps | - Add and subtract fractions with the same denominator | - Convert mixed to improper fractions and vice versa - Add and subtract fractions changing both denominators - Multiply fraction and integer - Divide with two fractions | complete all calculations with mixed and improper fractions <br> - Complete all calculations with fractions and algebra | - To convert mixed and improper fractions <br> - To add and subtract with fractions <br> - To multiply and divide with fractions <br> - To complete calculations with mixed and improper fractions <br> - To complete calculations with fractions and algebra |
|  | Working towards | Advancing |  |  |
|  | ```Add and subtract fractions when changing one denominator Multiply two fractions``` | Divide fraction by integers and vice versa <br> Worded and multi-step fractions calculations |  |  |
| Assessments | - Check of understandin | g in class and homework |  |  |


| Where will we use these ideas again: | Application of fraction calculations |
| :--- | :--- |
| Fractions, decimals and percentages |  |
| Fractions and Algebra |  |

