



Willow

### **Maths**

Key Stage 1

### **Curriculum Intent:**

- The teaching of mathematics is adapted from the National Curriculum and is designed to be functional, multisensory, and hands-on with concrete experiences to engage each student.
- The teaching of mathematics promotes independence and develops cognition, sensory, communication, and social interactions while developing mathematical exploration.
- Practical play develops students' knowledge and confidence in exploring number, shape, and mathematical language.
- In addition to practical play, students are supported to develop their mathematical knowledge within well-timed discrete maths sessions.
- Mathematical concepts can be taught through Attention Autism, multi-sensory stories, TEACCH, and musical songs so that children can recognise maths in the world around them and use their mathematical skills outside of 'maths' lessons.
- Understanding of mathematical concepts is achieved through repetition, in a range of contexts and over a period.

### **Curriculum Coverage**

- Early Number
- Early Geometry
- Early Measurement

# **Learning Specific Skills:**

#### Students in Key Stage 1 are:

- Engaging in number songs to begin to develop an awareness of place value.
- Participating in action rhymes.
- Participating in practical everyday routines with support, such as hanging their coat up.
- Noticing changes and exploring cause and effect activities and toys.
- Participating in daily routines to develop a sense of passage of time.
- · Copying simple patterns with a range of materials.
- Engaging in supported categorisation of objects.
- Exploring seasonal changes days and months of the year through topic-based activities.
- · Beginning to mark make.

### **Universal Skills:**

**COMMUNICATION:** I can listen to others, follow one-step instructions with visual supports.

**PROBLEM SOLVING:** With support, I can engage in activities that cultivate mathematical curiosity.

AIMING HIGH: I am motivated to participate in hands-on exploration of mathematical learning.

**TEAM WORK:** I am able to work and explore concepts comfortably with peers around me.





Willow

### Maths

Key Stage 2

### **Curriculum Intent:**

- The teaching of mathematics is adapted from the National Curriculum and is designed to be functional, multisensory, and hands-on with concrete experiences to engage each student.
- The teaching of mathematics continues to promote independence and develops cognition, sensory, communication, and social interactions while developing mathematical exploration.
- Opportunities for practical play are considered in timetabling to further develop students' knowledge and confidence in exploring number, shape, and mathematical language.
- In Key Stage 2, students are developing their self-confidence and elements of independence in their learning tasks.
- Students begin to experience subject-specific learning so that curriculum areas can be taught formally to ensure linear progress.
- Students have opportunities to apply their knowledge to functional daily activities and routines.
- Understanding of mathematical concepts is achieved through repetition, in a range of contexts and over a period.

#### **Curriculum Coverage**

- Number
- Geometry
- Measurement and time
- Early Money

# **Learning Specific Skills:**

#### Students in Key Stage 2 are:

- Participating in practical everyday routines with less support, such as hanging their coat up.
- Following visual timetables with greater independence.
- · Noticing changes and predicating what will happen during cause and effect activities.
- Continuing to participate in daily routines to develop a sense of passage of time.
- · Creating simple patterns with a range of materials.
- Engaging in supported categorisation of objects.
- Exploring seasonal changes days and months of the year through topic-based activities.
- Forming numbers (as appropriate).
- Recognising common 2D shapes and beginning to explore properties with support.
- Learning to rote count numbers reliably and with support beginning to solve simple number problems in objective situations.
- Exploring and using common mathematical language to compare.

### **Universal Skills:**

**COMMUNICATION**: I can listen to others, remember one-part instructions, and I am beginning to record mathematical information.

**PROBLEM SOLVING**: With support, I can follow instructions to participate in mathematical activities.

**<u>AIMING HIGH:</u>** My resilience is increasing, and I am beginning to take pride in my work.

**TEAM WORK:** I am beginning to work in small groups and scaffold through peer play.





Willow

### Maths

Key Stage 3

### **Curriculum Intent:**

- The teaching of mathematics is adapted from the National Curriculum and is designed to be functional, multisensory, and hands-on with concrete experiences to engage each student.
- The teaching of mathematics continues to promote independence and develops cognition, sensory, communication, and social interactions while developing mathematical exploration.
- In Key Stage 3, students are further developing their self-confidence and there is a higher expectation to work with greater independence on appropriate concrete tasks.
- Students are encouraged to take responsibility and reflect on their learning experiences and supported to give peer feedback.
- Students access subject-specific learning so that curriculum areas can be taught formally to ensure linear progress. Subjects have practical and functional elements to make the learning purposeful. Students have opportunities to apply their learning in real life experiences.

### **Curriculum Coverage**

- Number
- Geometry
- · Measurement and time
- Money
- Statistics
- Division ad Fractions (as appropriate)

# **Learning Specific Skills:**

- · Participating in practical everyday routines independently, such as hanging their coat up.
- Developing understanding of whole numbers and the concept of place value.
- Developing confidence with number bonds (incrementally where appropriate).
- · Following visual timetables independently.
- Students are beginning to develop an awareness of significant times of the day.
- Forming numbers legibly and independently (when appropriate).
- Identifying and describing common 2D shapes and sorting different shapes.
- Recognising common 3D shapes and beginning to explore properties with support.
- Learning to rote count numbers reliably and with support beginning to solve simple number problems in objective situations.
- Pupils begin to demonstrate an awareness of categorising objects by their features and learn the
  value of 'sets'- providing a more in-depth introduction of the concept of early subtraction, addition,
  multiplication, and division (as appropriate)
- Exploring and using common mathematical language to compare.

### **Universal Skills:**

**COMMUNICATION**: I can listen to others, remember two-part instructions, and I am able to record mathematical information with support.

**PROBLEM SOLVING**: I can follow instructions to complete mathematical tasks.

**AIMING HIGH:** My resilience is increasing, and I am beginning to cultivate a 'can do' mentality towards mathematical learning.





Willow

### **Maths**

## Key Stage 4

## **Curriculum Intent:**

- The teaching of mathematics is adapted from the National Curriculum and is designed to be functional, multisensory, and hands-on with concrete experiences to engage each student.
- The teaching of mathematics continues to promote independence and develops cognition, sensory, communication, and social interactions while developing mathematical exploration.
- In Key Stage 4, students are consolidating their learning.
- Students will have opportunity to transfer and apply their mathematical knowledge functionally to the world around them through work-related learning opportunities and independent living experiences.
- As appropriate, students have the opportunity to access accreditation opportunities, including Early Level Functional skills qualifications.
- Students will have opportunity to transfer and apply their mathematical knowledge functionally to the world around them through work-related learning opportunities and independent living experiences.

# Implementation:

#### **Curriculum Coverage**

- Number
- Geometry
- · Measurement and time
- Money
- Statistics
- Division ad Fractions (as appropriate)

# **Learning Specific Skills:**

- · Becoming increasingly fluent with whole numbers and place value.
- Developing confidence with number bonds (incrementally where appropriate).
- Developing awareness of how to complete addition and subtraction on calculators.
- Students have a good awareness of significant times of the day.
- Forming numbers legibly and independently (when appropriate).
- Naming and describing common 2D and 3D shapes and identifying them in the environment.
- Students are able to rote count numbers to larger numbers reliably and with support beginning to solve simple number problems in objective situations.
- Pupils explore using measuring instruments with some accuracy, beginning to link measurement and number.

## **Universal Skills:**

<u>COMMUNICATION</u>: I can listen to others, remember two-part instructions, and I am able to record mathematical information. I am beginning to use facts to reason.

**PROBLEM SOLVING:** I can follow instructions to complete mathematical tasks. I am beginning to ask questions to explore mathematical concepts.

<u>AIMING HIGH</u>: My resilience is increasing, and I have a 'can do' attitude to apply my mathematical knowledge in functional daily situations.