

1:1 YEAR 6 MATHS INTERVENTION PLAN FOR SEN STUDENTS

OBJECTIVE:

This intervention plan is tailored to help children with ADHD and ASC achieve the Year 6 maths objectives in the UK curriculum while addressing behavioural needs. It is designed to cover the entire school year, with flexibility for adjustments based on individual progress. If a child struggles with a concept in a particular session when assessed, then the session should be repeated in later weeks for consolidation. This plan can also be adjusted for a small group of students if needed.

KEY MATHS SKILLS BASED ON YEAR 6 UK CURRICULUM:

1. Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
2. Round any whole number to a required degree of accuracy.
3. Use negative numbers in context and calculate intervals across zero.
4. Solve number and practical problems that involve all of the above.
5. Perform mental calculations, including with mixed operations and large numbers.
6. Identify common factors, common multiples, and prime numbers.
7. Use knowledge of the order of operations to carry out calculations involving the four operations.
8. Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
9. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division.
10. Associate a fraction with division and calculate decimal fraction equivalents.
11. Recall and use equivalences between simple fractions, decimals, and percentages.
12. Solve problems involving the calculation of percentages.
13. Solve problems involving ratio and proportion.
14. Use simple formulae expressed in words.
15. Generate and describe linear number sequences.
16. Convert between units of measure, including using decimal notation up to three decimal places.
17. Calculate the area of parallelograms and triangles.
18. Calculate, estimate, and compare volume of cubes and cuboids using standard units.
19. Draw 2-D shapes using given dimensions and angles.
20. Recognise, describe, and build simple 3-D shapes, including making nets.
21. Interpret and construct pie charts and line graphs and use these to solve problems.
22. Calculate and interpret the mean as an average.

GENERAL SESSION STRUCTURE:

Each week will include three sessions, each lasting **30–45 minutes** depending on the child's attention span and engagement. Each session is structured as follows:

1. Warm-Up (5 minutes): Sensory or physical activity to help the child transition into learning.
 2. Main Activity (20-30 minutes): Focus on a key maths skill for the week, with breaks if needed.
 3. Sensory/Movement Break (2-5 minutes): A break to release energy or calm the child.
 4. Review and Reward (5-10 minutes): Recap learning and provide positive reinforcement.
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WEEK 1-2: PLACE VALUE AND NUMBER SENSE

Learning Objective:

- Read, write, order, and compare numbers up to 10,000,000 and determine the value of each digit.
- Round any whole number to a required degree of accuracy.

ACTIVITIES:

Session 1: Understanding Place Value up to 10,000,000

➤ Warm-Up (5 minutes):

- **Activity:** Place Value Hopscotch
- **Description:** Create a hopscotch grid with place value headings (ones to ten millions). The child hops to the called-out place value.

➤ Main Activity (25 minutes):

- **Place Value Chart:**
 - Introduce a place value chart up to ten millions.
 - Use digit cards to build large numbers, placing them in the correct columns.
- **Value Identification:**
 - Provide numbers with underlined digits; the child identifies the value of the underlined digit.
- **Ordering Numbers:**
 - Give sets of large numbers for the child to arrange in ascending or descending order.

➤ Sensory Break (5 minutes):

- **Activity:** Deep Breathing with Movement
- **Description:** Combine deep breaths with arm stretches.

➤ Review and Reward (5 minutes):

- **Activity:** Quick-Fire Questions
- **Description:** Ask questions about place value and number ordering.
- **Reward:** Sticker or token for participation.

Session 2: Rounding Whole Numbers

➤ Warm-Up (5 minutes):

- **Activity:** Rounding Rhyme
- **Description:** Recite a rhyme to remember rounding rules.

➤ Main Activity (25 minutes):

- **Rounding Rules:**
 - Review rounding to the nearest 10, 100, 1,000, 10,000, 100,000, and 1,000,000.
 - Use number lines to visualise rounding.
- **Practical Exercises:**
 - Provide numbers to round to different degrees of accuracy.
 - Include real-life scenarios, such as estimating populations.
- **Interactive Game:**
 - Play "Rounding Bingo" where the child rounds numbers to fill their bingo card.

➤ Sensory Break (5 minutes):

- **Activity:** Movement Dice
- **Description:** Roll a dice with different movements and perform the action.

➤ Review and Reward (5 minutes):

- **Activity:** Rounding Challenge
- **Description:** Timed activity to round as many numbers as possible.
- **Reward:** Praise and a small prize.

Session 3: Comparing and Ordering Large Numbers

- **Warm-Up (5 minutes):**
 - **Activity:** Greater Than or Less Than Game
 - **Description:** Use cards to compare large numbers using '>' and '<' symbols.
- **Main Activity (25 minutes):**
 - **Ordering Activity:**
 - Provide a mix of numbers up to 10,000,000.
 - The child orders them from smallest to largest and vice versa.
 - **Number Line Placement:**
 - Place numbers on a large number line.
 - Discuss the relative positions of the numbers.
 - **Real-Life Context:**
 - Use statistics (e.g., country populations) for comparison exercises.
- **Sensory Break (5 minutes):**
 - **Activity:** Stretch and Shake
 - **Description:** Simple stretches and shakes to re-energise.
- **Review and Reward (5 minutes):**
 - **Activity:** Number Detective
 - **Description:** Provide clues about a number; the child identifies it.
 - **Reward:** Certificate of achievement.

Materials:

- Place value charts up to ten millions
- Digit cards (0-9)
- Large number lines
- Number cards up to 10,000,000
- Rounding worksheets
- Bingo cards
- Movement dice
- Stickers and certificates

ADHD/ASC Strategies:

- **Visual Aids:** Use charts and number lines to make abstract concepts concrete.
- **Movement Integration:** Incorporate physical activities to maintain engagement.
- **Short, Varied Tasks:** Keep activities brief and change them frequently to sustain attention.
- **Positive Reinforcement:** Provide immediate praise and rewards.

WEEK 3-4: NEGATIVE NUMBERS AND INTERVALS ACROSS ZERO

Learning Objective:

- Use negative numbers in context and calculate intervals across zero.
- Solve number and practical problems that involve all of the above.

ACTIVITIES:

Session 1: Exploring Negative Numbers

- **Warm-Up (5 minutes):**
 - **Activity:** Temperature Talks
 - **Description:** Discuss weather temperatures, including below zero.
- **Main Activity (25 minutes):**
 - **Number Line Exploration:**
 - Use a vertical number line to represent temperatures.
 - Practice counting forwards and backwards through zero.
 - **Real-Life Contexts:**
 - Explore situations involving negative numbers (e.g., bank overdrafts, elevations).
 - **Interactive Game:**
 - Play "Integer Bingo" using positive and negative numbers.
- **Sensory Break (5 minutes):**
 - **Activity:** Balloon Breathing
 - **Description:** Deep breaths imagining inflating a balloon.
- **Review and Reward (5 minutes):**
 - **Activity:** Negative Number Quiz
 - **Description:** Solve calculations involving negative numbers.
 - **Reward:** Sticker or small prize.

Session 2: Calculating Intervals Across Zero

- **Warm-Up (5 minutes):**
 - **Activity:** Number Line Hop
 - **Description:** Hop along a floor number line that includes negative numbers.
- **Main Activity (25 minutes):**
 - **Interval Calculations:**
 - Teach how to calculate the difference between negative and positive numbers.
 - **Practice Problems:**
 - Provide exercises with real-life contexts (e.g., temperature changes).
 - **Visual Aids:**
 - Use number lines to illustrate calculations.
- **Sensory Break (5 minutes):**
 - **Activity:** Sensory Bin Exploration
 - **Description:** Tactile play with a sensory bin.
- **Review and Reward (5 minutes):**
 - **Activity:** Create Your Own Problem
 - **Description:** Have the child write a problem involving intervals across zero.
 - **Reward:** Certificate or extra choice time.

Session 3: Applying Negative Numbers in Context

- **Warm-Up (5 minutes):**
 - **Activity:** Role-Play Scenarios
 - **Description:** Act out situations involving negative numbers.
- **Main Activity (25 minutes):**
 - **Word Problems:**
 - Solve practical problems involving negative numbers (e.g., temperatures, finances).
 - **Group Discussion:**
 - Discuss strategies and reasoning behind solutions.
 - **Game Time:**
 - Play "Negative Number Snap" with cards.
- **Sensory Break (5 minutes):**
 - **Activity:** Yoga Stretches
 - **Description:** Simple yoga poses to relax.
- **Review and Reward (5 minutes):**
 - **Activity:** Reflection
 - **Description:** Discuss what was learned and any challenges.
 - **Reward:** Positive feedback.

Materials:

- Vertical and horizontal number lines (including negatives)
- Bingo cards
- Sensory bin materials
- Worksheets with interval calculations
- Role-play props

ADHD/ASC Strategies:

- **Real-Life Contexts:** Use practical examples to make learning relevant.
- **Interactive Activities:** Incorporate games and movement.
- **Sensory Integration:** Provide sensory breaks.
- **Positive Reinforcement:** Celebrate successes.

WEEK 5-6: MENTAL CALCULATIONS AND ORDER OF OPERATIONS

Learning Objective:

- Perform mental calculations, including with mixed operations and large numbers.
- Use knowledge of the order of operations to carry out calculations involving the four operations.

ACTIVITIES:

Session 1: Enhancing Mental Maths Skills

- **Warm-Up (5 minutes):**
 - **Activity:** Mental Maths Flashcards
 - **Description:** Quick-fire mental calculations.
- **Main Activity (25 minutes):**
 - **Mental Strategies:**
 - Teach strategies for mental addition, subtraction, multiplication, and division.
 - **Practice Drills:**
 - Timed challenges to solve mental maths problems.
 - **Games:**
 - Play "Maths Bingo" focusing on mental calculations.
- **Sensory Break (5 minutes):**
 - **Activity:** Movement Game
 - **Description:** "Simon Says" with maths actions.
- **Review and Reward (5 minutes):**
 - **Activity:** Speed Challenge
 - **Description:** Solve as many problems as possible in a set time.
 - **Reward:** Praise and a small prize.

Session 2: Understanding the Order of Operations

- **Warm-Up (5 minutes):**
 - **Activity:** BODMAS Song
 - **Description:** Learn a song to remember the order of operations.
- **Main Activity (25 minutes):**
 - **Teaching the Concept:**
 - Explain the order of operations using BODMAS (Brackets, Orders, Division and Multiplication, Addition and Subtraction).
 - **Worked Examples:**
 - Go through examples step-by-step.
 - **Practice Problems:**
 - Provide a range of calculations to solve.
 - **Interactive Activity:**
 - Use cards to rearrange steps in the correct order.
- **Sensory Break (5 minutes):**
 - **Activity:** Stretch and Relax
 - **Description:** Simple stretches to refocus.
- **Review and Reward (5 minutes):**
 - **Activity:** Order of Operations Quiz
 - **Description:** Quick questions to reinforce learning.
 - **Reward:** Sticker or token.

Session 3: Applying Mental Calculations and Order of Operations

- **Warm-Up (5 minutes):**
 - **Activity:** Maths Relay
 - **Description:** Solve problems to move forward in a game.
- **Main Activity (25 minutes):**
 - **Mixed Problems:**
 - Solve calculations combining mental maths and order of operations.
 - **Real-Life Contexts:**
 - Apply skills to scenarios like shopping or budgeting.
 - **Group Discussion:**
 - Share strategies and discuss different methods.
- **Sensory Break (5 minutes):**
 - **Activity:** Breathing Exercises
 - **Description:** Deep breathing to calm and focus.
- **Review and Reward (5 minutes):**
 - **Activity:** Reflect on Learning
 - **Description:** Discuss what was easy or challenging.
 - **Reward:** Certificate of achievement.

Materials:

- Flashcards
- Worksheets
- Bingo cards
- Song lyrics for BODMAS
- Game boards
- Tokens or counters

ADHD/ASC Strategies:

- **Interactive Learning:** Use games and songs to engage.
- **Visual Aids:** Provide clear, step-by-step examples.
- **Positive Reinforcement:** Immediate praise.
- **Sensory Breaks:** Incorporate movement.

WEEK 7-8: MULTIPLICATION AND DIVISION METHODS

Learning Objective:

- Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
- Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division.

ACTIVITIES:

Session 1: Long Multiplication

- **Warm-Up (5 minutes):**
 - **Activity:** Times Table Quick-Fire
 - **Description:** Review multiplication facts up to 12×12 .
- **Main Activity (25 minutes):**
 - **Teaching Long Multiplication:**
 - Demonstrate the steps of long multiplication.
 - Use colour-coding to highlight each step.
 - **Guided Practice:**
 - Solve problems together, gradually increasing difficulty.
 - **Independent Practice:**
 - Provide worksheets for individual work.
- **Sensory Break (5 minutes):**
 - **Activity:** Finger Stretches
 - **Description:** Exercises to relax hands.
- **Review and Reward (5 minutes):**
 - **Activity:** Check and Correct
 - **Description:** Review answers and correct mistakes.
 - **Reward:** Praise and a sticker.

Session 2: Long Division

- **Warm-Up (5 minutes):**
 - **Activity:** Division Facts Drill
 - **Description:** Quick recall of division facts.
- **Main Activity (25 minutes):**
 - **Teaching Long Division:**
 - Explain the long division process step-by-step.
 - Use mnemonic devices to remember steps.
 - **Worked Examples:**
 - Go through examples with the child.
 - **Practice Problems:**
 - Provide problems for the child to solve.
- **Sensory Break (5 minutes):**
 - **Activity:** Movement Break
 - **Description:** Choose a favourite physical activity.
- **Review and Reward (5 minutes):**
 - **Activity:** Reflect on Process
 - **Description:** Discuss understanding and areas needing more practice.
 - **Reward:** Positive feedback.

Session 3: Applying Multiplication and Division

- **Warm-Up (5 minutes):**
 - **Activity:** Maths Puzzles
 - **Description:** Solve puzzles involving multiplication and division.
- **Main Activity (25 minutes):**
 - **Word Problems:**
 - Apply skills to real-life situations (e.g., dividing items among groups).
 - **Group Discussion:**
 - Share problem-solving strategies.
 - **Game Time:**
 - Play "Maths Jeopardy" focusing on multiplication and division.
- **Sensory Break (5 minutes):**
 - **Activity:** Relaxing Music
 - **Description:** Listen to calming music.
- **Review and Reward (5 minutes):**
 - **Activity:** Success Sharing
 - **Description:** Celebrate achievements.
 - **Reward:** Certificate or small prize.

Materials:

- Multiplication and division worksheets
- Coloured pens or pencils
- Flashcards
- Puzzles and games
- Music player

ADHD/ASC Strategies:

- **Clear Instructions:** Break down steps clearly.
- **Hands-On Practice:** Provide ample opportunities for practice.
- **Positive Reinforcement:** Encourage effort and progress.
- **Sensory Breaks:** Schedule to maintain focus.

REVIEW AND PROGRESS MONITORING:

- **Weekly Assessments:** Use observations, quizzes, and discussions to gauge understanding.
- **Progress Charts:** Visual trackers to show skill mastery, rewarding milestones with stickers or small rewards.
- **Adjustments:** Modify sessions based on engagement and comprehension, extending focus on difficult concepts over multiple weeks if needed.

WEEK 9-10: FRACTIONS, DECIMALS, AND PERCENTAGES

Learning Objective:

- Associate a fraction with division and calculate decimal fraction equivalents.
- Recall and use equivalences between simple fractions, decimals, and percentages.
- Solve problems involving the calculation of percentages.

ACTIVITIES:

Session 1: Associating Fractions with Division

➤ Warm-Up (5 minutes):

- **Activity:** Fraction Flashcards
- **Description:** Quick recall of fraction facts and terminology.

➤ Main Activity (25 minutes):

- **Understanding Fractions as Division:**
 - Explain that fractions represent division (e.g., $\frac{3}{4}$ means 3 divided by 4).
 - Use visual aids like pie charts to illustrate how dividing a whole into parts creates fractions.
- **Converting Fractions to Decimals:**
 - Demonstrate how to divide the numerator by the denominator to find the decimal equivalent.
 - Provide practice problems for the child to solve, using calculators if appropriate.
- **Interactive Activity:**
 - Use fraction and decimal cards to play a matching game, pairing fractions with their decimal equivalents.

➤ Sensory Break (5 minutes):

- **Activity:** Stretch and Relax
- **Description:** Simple stretches and deep breathing to refocus.

➤ Review and Reward (5 minutes):

- **Activity:** Quick Quiz
- **Description:** Convert given fractions to decimals.
- **Reward:** Praise and a sticker.

Session 2: Equivalences Between Fractions, Decimals, and Percentages

➤ Warm-Up (5 minutes):

- **Activity:** Percentage Snap
- **Description:** Match percentages to their fraction and decimal equivalents.

➤ Main Activity (25 minutes):

- **Teaching Equivalences:**
 - Create a chart of common fractions and their decimal and percentage equivalents (e.g., $\frac{1}{2} = 0.5 = 50\%$).
 - Discuss how understanding these equivalences can help in everyday situations.
- **Visual Aids:**
 - Use pie charts and bar models to represent fractions, decimals, and percentages visually.
- **Practice Exercises:**
 - Provide problems that require converting between fractions, decimals, and percentages.
- **Interactive Game:**
 - Play "Equivalence Bingo," where the child matches different representations on their bingo card.

- **Sensory Break (5 minutes):**
 - **Activity:** Movement Game
 - **Description:** Dance or move to a favourite song.
- **Review and Reward (5 minutes):**
 - **Activity:** Equivalence Challenge
 - **Description:** Solve problems involving conversions.
 - **Reward:** Positive feedback and a small prize.

Session 3: Calculating Percentages of Amounts

- **Warm-Up (5 minutes):**
 - **Activity:** Mental Maths Drill
 - **Description:** Quick-fire calculations of simple percentages (e.g., 10% of 50).
- **Main Activity (25 minutes):**
 - **Methods for Calculating Percentages:**
 - Teach how to find 10%, 5%, 1% of a number and use these to calculate other percentages.
 - Introduce methods such as multiplying the amount by the percentage expressed as a decimal (e.g., 25% of 80 = 0.25×80).
 - **Word Problems:**
 - Solve real-life problems involving percentages, such as sales discounts, VAT, or interest rates.
 - **Practice Exercises:**
 - Provide a variety of percentage problems for the child to solve, increasing in complexity.
- **Sensory Break (5 minutes):**
 - **Activity:** Deep Breathing
 - **Description:** Calming breaths to refocus.
- **Review and Reward (5 minutes):**
 - **Activity:** Percentage Quiz
 - **Description:** Solve percentage problems independently.
 - **Reward:** Certificate of achievement.

Materials:

- Fraction, decimal, and percentage charts
- Flashcards
- Worksheets
- Calculators (if appropriate)
- Bingo cards
- Coloured pencils or markers
- Pie charts and bar models

ADHD/ASC Strategies:

- **Visual Supports:** Use charts and visual aids to reinforce learning.
- **Interactive Activities:** Incorporate games and movement to maintain engagement.
- **Positive Reinforcement:** Provide immediate praise and tangible rewards.
- **Sensory Breaks:** Include regular breaks to help with focus and regulation.

WEEK 11-12: RATIO AND PROPORTION

Learning Objective:

- Solve problems involving ratio and proportion.

ACTIVITIES:

Session 1: Understanding Ratios

➤ Warm-Up (5 minutes):

- **Activity:** Ratio Riddles
- **Description:** Solve simple riddles involving ratios.

➤ Main Activity (25 minutes):

- **Introducing Ratios:**
 - Explain what a ratio is and how it compares quantities.
 - Use real-life examples, such as mixing paint colours or recipes.
- **Visual Representation:**
 - Use coloured counters or blocks to represent ratios (e.g., 2 red for every 3 blue).
- **Practice Problems:**
 - Provide simple ratio problems to solve.

➤ Sensory Break (5 minutes):

- **Activity:** Movement Break
- **Description:** Jumping jacks or stretching.

➤ Review and Reward (5 minutes):

- **Activity:** Ratio Matching Game
- **Description:** Match ratio statements to visual representations.
- **Reward:** Praise and a sticker.

Session 2: Solving Proportion Problems

➤ Warm-Up (5 minutes):

- **Activity:** Proportion Puzzles
- **Description:** Quick puzzles involving proportional reasoning.

➤ Main Activity (25 minutes):

- **Understanding Proportion:**
 - Explain that proportion is about scaling ratios up or down.
- **Scaling Recipes:**
 - Use recipe examples to show how proportions work when increasing or decreasing quantities.
- **Word Problems:**
 - Solve problems involving proportions, such as map scales or model building.

➤ Sensory Break (5 minutes):

- **Activity:** Deep Breathing
- **Description:** Calm breathing exercises.

➤ Review and Reward (5 minutes):

- **Activity:** Proportion Quiz
- **Description:** Solve proportion problems.
- **Reward:** Positive feedback.

Session 3: Applying Ratios and Proportions

- **Warm-Up (5 minutes):**
 - **Activity:** Ratio and Proportion Snap
 - **Description:** Card game matching ratios and proportions.
- **Main Activity (25 minutes):**
 - **Problem Solving:**
 - Tackle more complex problems involving ratios and proportions.
 - Use real-life contexts like sharing costs or comparing speeds.
 - **Interactive Activity:**
 - Create a scale model or drawing using given ratios.
- **Sensory Break (5 minutes):**
 - **Activity:** Sensory Play
 - **Description:** Use playdough or kinetic sand.
- **Review and Reward (5 minutes):**
 - **Activity:** Reflect on Learning
 - **Description:** Discuss challenges and successes.
 - **Reward:** Certificate or small prize.

Materials:

- Coloured counters or blocks
- Worksheets with ratio and proportion problems
- Recipe cards
- Measuring tools (rulers, scales)
- Art materials for scale drawings

ADHD/ASC Strategies:

- **Hands-On Learning:** Use manipulatives to illustrate concepts.
- **Real-Life Contexts:** Apply maths to practical situations.
- **Positive Reinforcement:** Encourage and reward effort.
- **Sensory Breaks:** Include activities that meet sensory needs.

WEEK 13-14: ALGEBRA AND SEQUENCES

Learning Objectives:

- Use simple formulae expressed in words.
- Generate and describe linear number sequences.

ACTIVITIES:

Session 1: Introduction to Algebra

- **Warm-Up (5 minutes):**
 - **Activity:** Mystery Number
 - **Description:** Guess a number based on clues.
- **Main Activity (25 minutes):**
 - **Understanding Variables:**
 - Introduce the concept of a variable as a placeholder for numbers.
 - Use simple equations with missing numbers (e.g., $3 + \square = 7$).
 - **Writing Simple Formulae:**
 - Express relationships using words (e.g., "cost = number of items \times price per item").
 - **Practice Problems:**
 - Solve simple equations and write formulae.
- **Sensory Break (5 minutes):**
 - **Activity:** Movement Game
 - **Description:** Dance or move to a song.
- **Review and Reward (5 minutes):**
 - **Activity:** Equation Match-Up
 - **Description:** Match word problems to equations.
 - **Reward:** Praise and a sticker.

Session 2: Generating Linear Sequences

- **Warm-Up (5 minutes):**
 - **Activity:** Counting Patterns
 - **Description:** Continue number patterns aloud.
- **Main Activity (25 minutes):**
 - **Understanding Sequences:**
 - Explain how sequences follow a rule.
 - Generate sequences using a given rule (e.g., start at 2, add 3 each time).
 - **Describing Sequences:**
 - Identify the rule in a given sequence.
 - Use algebraic expressions to represent the n th term.
 - **Practice Exercises:**
 - Provide sequences to extend and describe.
- **Sensory Break (5 minutes):**
 - **Activity:** Stretch and Relax
 - **Description:** Simple stretches.
- **Review and Reward (5 minutes):**
 - **Activity:** Sequence Challenge
 - **Description:** Create their own sequence for someone else to solve.

- **Reward:** Positive feedback.

Session 3: Applying Algebra to Problem Solving

- **Warm-Up (5 minutes):**
 - **Activity:** Algebraic Bingo
 - **Description:** Solve equations to fill bingo cards.
- **Main Activity (25 minutes):**
 - **Using Formulae in Context:**
 - Apply formulae to real-life situations (e.g., calculating area, perimeter).
 - **Word Problems:**
 - Solve problems requiring the use of algebraic expressions.
 - **Group Discussion:**
 - Discuss different strategies and solutions.
- **Sensory Break (5 minutes):**
 - **Activity:** Deep Breathing
 - **Description:** Calm breathing exercises.
- **Review and Reward (5 minutes):**
 - **Activity:** Reflect on Learning
 - **Description:** Discuss what was learned.
 - **Reward:** Certificate or small prize.

Materials:

- Worksheets with equations and sequences
- Bingo cards
- Coloured pens or pencils
- Number pattern cards

ADHD/ASC Strategies:

- **Clear Instructions:** Break down concepts into manageable steps.
- **Interactive Activities:** Use games to reinforce learning.
- **Positive Reinforcement:** Provide immediate praise.
- **Sensory Breaks:** Schedule breaks to help maintain focus.

WEEK 15-16: MEASUREMENT AND CONVERSIONS

Learning Objective:

Convert between units of measure, including using decimal notation up to three decimal places.

ACTIVITIES:

Session 1: Converting Units of Length

➤ Warm-Up (5 minutes):

- **Activity:** Measurement Matching
- **Description:** Match objects to appropriate units (e.g., length of a pencil to centimetres).

➤ Main Activity (25 minutes):

- **Understanding Metric Units:**
 - Review millimetres, centimetres, metres, and kilometres.
 - Discuss how to convert between units (e.g., 1 m = 100 cm).
- **Practice Conversions:**
 - Solve problems converting between units, including decimals (e.g., 1.75 m = 175 cm).
- **Real-Life Application:**
 - Measure items and record lengths in different units.

➤ Sensory Break (5 minutes):

- **Activity:** Movement Game
- **Description:** Jump or step the length of measured units.

➤ Review and Reward (5 minutes):

- **Activity:** Conversion Quiz
- **Description:** Quick-fire conversion questions.
- **Reward:** Praise and a sticker.

Session 2: Converting Units of Mass and Capacity

➤ Warm-Up (5 minutes):

- **Activity:** Estimation Challenge
- **Description:** Estimate the mass or capacity of objects.

➤ Main Activity (25 minutes):

- **Review Metric Units:**
 - Discuss grams, kilograms, millilitres, and litres.
- **Conversion Practice:**
 - Solve problems converting between units, including decimal notation.
- **Hands-On Activity:**
 - Use scales and measuring jugs to measure and convert.

➤ Sensory Break (5 minutes):

- **Activity:** Sensory Play
- **Description:** Use water play to explore capacity.

➤ Review and Reward (5 minutes):

- **Activity:** Real-Life Problem Solving
- **Description:** Solve practical problems involving mass and capacity.
- **Reward:** Positive feedback.

Session 3: Converting Units of Time and Complex Conversions

➤ **Warm-Up (5 minutes):**

- **Activity:** Time Talk
- **Description:** Discuss daily schedules and time units.

➤ **Main Activity (25 minutes):**

- **Understanding Time Conversions:**
 - Convert between seconds, minutes, hours, and days.
- **Complex Conversions:**
 - Solve problems involving multiple conversions (e.g., converting 1.5 hours to minutes).
- **Practice Exercises:**
 - Provide a variety of problems, including those with decimal notation up to three places.

➤ **Sensory Break (5 minutes):**

- **Activity:** Relaxation Breathing
- **Description:** Deep breaths to refocus.

➤ **Review and Reward (5 minutes):**

- **Activity:** Conversion Challenge
- **Description:** Timed activity to solve as many conversions as possible.
- **Reward:** Certificate of achievement.

Materials:

- Measuring tapes and rulers
- Scales and measuring jugs
- Worksheets with conversion problems
- Stopwatch or timer
- Water play materials

ADHD/ASC Strategies:

- **Hands-On Learning:** Use physical measurement tools.
- **Visual Aids:** Provide charts and conversion tables.
- **Positive Reinforcement:** Encourage and reward effort.
- **Sensory Breaks:** Include activities that meet sensory needs.

WEEK 17-18: AREA, PERIMETER, AND VOLUME

Learning Objective:

- Calculate the area of parallelograms and triangles.
- Calculate, estimate, and compare volume of cubes and cuboids using standard units.

ACTIVITIES:

Session 1: Calculating Area of Parallelograms

➤ Warm-Up (5 minutes):

- **Activity:** Shape Sorting
- **Description:** Identify and sort different quadrilaterals.

➤ Main Activity (25 minutes):

- **Understanding Parallelograms:**
 - Discuss the properties of parallelograms.
- **Area Formula:**
 - Teach the formula for the area ($\text{Area} = \text{base} \times \text{height}$).
- **Practice Problems:**
 - Calculate the area using given measurements.
- **Hands-On Activity:**
 - Use grid paper to draw and calculate areas.

➤ Sensory Break (5 minutes):

- **Activity:** Stretch and Relax
- **Description:** Simple stretches.

➤ Review and Reward (5 minutes):

- **Activity:** Area Quiz
- **Description:** Solve area problems independently.
- **Reward:** Praise and a sticker.

Session 2: Calculating Area of Triangles

➤ Warm-Up (5 minutes):

- **Activity:** Triangle Hunt
- **Description:** Find objects shaped like triangles.

➤ Main Activity (25 minutes):

- **Area Formula:**
 - Teach the formula for the area of a triangle ($\text{Area} = \frac{1}{2} \times \text{base} \times \text{height}$).
- **Visual Demonstration:**
 - Show how a triangle is half of a parallelogram.
- **Practice Problems:**
 - Calculate area with different triangles.

➤ Sensory Break (5 minutes):

- **Activity:** Movement Game
- **Description:** Create triangle shapes with the body.

➤ Review and Reward (5 minutes):

- **Activity:** Area Challenge
- **Description:** Timed problem-solving.
- **Reward:** Positive feedback.

Session 3: Calculating and Comparing Volume

➤ **Warm-Up (5 minutes):**

- **Activity:** 3D Shape Identification
- **Description:** Identify cubes and cuboids in the environment.

➤ **Main Activity (25 minutes):**

- **Understanding Volume:**
 - Explain volume as the amount of space an object occupies.
- **Volume Formula:**
 - Teach how to calculate volume (Volume = length × width × height).
- **Hands-On Activity:**
 - Use unit cubes to build shapes and calculate volume.
- **Comparing Volumes:**
 - Estimate and compare volumes of different objects.

➤ **Sensory Break (5 minutes):**

- **Activity:** Deep Breathing
- **Description:** Calming exercises.

➤ **Review and Reward (5 minutes):**

- **Activity:** Volume Quiz
- **Description:** Solve volume problems.
- **Reward:** Certificate or small prize.

Materials:

- Grid paper
- Rulers
- Unit cubes or building blocks
- Worksheets with area and volume problems
- 3D shape models

ADHD/ASC Strategies:

- **Visual Supports:** Use diagrams and models.
- **Hands-On Learning:** Engage with physical building and measuring.
- **Positive Reinforcement:** Provide immediate praise.
- **Sensory Breaks:** Include activities to help with regulation.

Session 3: Creating and Interpreting Graphs

- **Warm-Up (5 minutes):**
 - **Activity:** Favourite Things Survey
 - **Description:** Collect data on favourite foods, colours, etc.
- **Main Activity (25 minutes):**
 - **Creating Graphs:**
 - Use collected data to create bar charts or line graphs.
 - **Interpreting Graphs:**
 - Practice reading graphs and extracting information.
 - **Discussion:**
 - Talk about the importance of accurate data representation.
- **Sensory Break (5 minutes):**
 - **Activity:** Dance Break
 - **Description:** Dance to a favourite song.
- **Review and Reward (5 minutes):**
 - **Activity:** Share and Reflect
 - **Description:** Present the graphs created.
 - **Reward:** Certificate of achievement.

Materials:

- Sample tables and timetables
- Graph paper
- Coloured pencils or markers
- Data collection sheets
- Movement dice

ADHD/ASC Strategies:

- **Real-Life Connections:** Use practical examples relevant to the child's experiences.
- **Interactive Activities:** Engage in role-play and hands-on creation.
- **Visual Supports:** Provide clear, structured materials.
- **Positive Reinforcement:** Encourage participation with praise and rewards.

WEEK 19-20: GEOMETRY – 2D AND 3D SHAPES

Learning Objective:

- Draw 2-D shapes using given dimensions and angles.
- Recognise, describe, and build simple 3-D shapes, including making nets.

ACTIVITIES:

Session 1: Drawing 2-D Shapes

- **Warm-Up (5 minutes):**
 - **Activity:** Angle Estimation
 - **Description:** Guess the size of angles.
- **Main Activity (25 minutes):**
 - **Using Protractors:**
 - Teach how to measure and draw angles accurately.
 - **Drawing Shapes:**
 - Provide instructions to draw specific 2-D shapes with given dimensions and angles.
 - **Practice Exercises:**
 - Draw various polygons, labelling sides and angles.
- **Sensory Break (5 minutes):**
 - **Activity:** Movement Break
 - **Description:** Physical activity to re-energise.
- **Review and Reward (5 minutes):**
 - **Activity:** Shape Gallery
 - **Description:** Display and discuss drawn shapes.
 - **Reward:** Praise and a sticker.

Session 2: Exploring 3-D Shapes

- **Warm-Up (5 minutes):**
 - **Activity:** 3-D Shape Hunt
 - **Description:** Find examples of 3-D shapes around the room.
- **Main Activity (25 minutes):**
 - **Recognising and Describing Shapes:**
 - Discuss properties of cubes, cuboids, pyramids, and prisms.
 - **Building Shapes:**
 - Use modelling clay or construction kits to build 3-D shapes.
 - **Describing Properties:**
 - Count faces, edges, and vertices.
- **Sensory Break (5 minutes):**
 - **Activity:** Sensory Play
 - **Description:** Use modelling materials.
- **Review and Reward (5 minutes):**
 - **Activity:** Show and Tell
 - **Description:** Present created shapes.
 - **Reward:** Positive feedback.

Session 3: Making Nets of 3-D Shapes

- **Warm-Up (5 minutes):**
 - **Activity:** Net Identification
 - **Description:** Match nets to the correct 3-D shapes.
- **Main Activity (25 minutes):**
 - **Understanding Nets:**
 - Explain how nets fold into 3-D shapes.
 - **Creating Nets:**
 - Provide templates to cut out and assemble.
 - **Design Activity:**
 - Challenge the child to design their own nets.
- **Sensory Break (5 minutes):**
 - **Activity:** Relaxation Breathing
 - **Description:** Deep breaths to refocus.
- **Review and Reward (5 minutes):**
 - **Activity:** Display Creations
 - **Description:** Show completed 3-D shapes.
 - **Reward:** Certificate of achievement.

Materials:

- Protractors and rulers
- Graph paper
- Modelling clay or construction kits
- Scissors, glue, and card for nets
- Worksheets with shape instructions

ADHD/ASC Strategies:

- **Hands-On Activities:** Engage with building and drawing.
- **Visual Supports:** Provide clear diagrams and templates.
- **Positive Reinforcement:** Encourage and praise efforts.
- **Sensory Breaks:** Include tactile activities.

WEEK 21-22: DATA HANDLING – GRAPHS AND AVERAGES

Learning Objectives:

- Interpret and construct pie charts and line graphs and use these to solve problems.
- Calculate and interpret the mean as an average.

ACTIVITIES:

Session 1: Constructing and Interpreting Line Graphs

- **Warm-Up (5 minutes):**
 - **Activity:** Data Discussion
 - **Description:** Talk about different types of graphs and their uses.
- **Main Activity (25 minutes):**
 - **Creating Line Graphs:**
 - Collect data (e.g., temperature over a week).
 - Plot data points and draw line graphs.
 - **Interpreting Graphs:**
 - Answer questions based on the graphs.
- **Sensory Break (5 minutes):**
 - **Activity:** Movement Game
 - **Description:** Act out rising and falling data.
- **Review and Reward (5 minutes):**
 - **Activity:** Graph Quiz
 - **Description:** Interpret given line graphs.
 - **Reward:** Praise and a sticker.

Session 2: Constructing and Interpreting Pie Charts

- **Warm-Up (5 minutes):**
 - **Activity:** Favourite Things Survey
 - **Description:** Collect data for the pie chart.
- **Main Activity (25 minutes):**
 - **Understanding Pie Charts:**
 - Explain how pie charts represent data as parts of a whole.
 - **Creating Pie Charts:**
 - Use collected data to create a pie chart, using protractors to measure angles.
 - **Interpreting Pie Charts:**
 - Discuss what the chart shows about the data.
- **Sensory Break (5 minutes):**
 - **Activity:** Deep Breathing
 - **Description:** Calm breathing exercises.
- **Review and Reward (5 minutes):**
 - **Activity:** Present Findings
 - **Description:** Share the pie chart and explain it.
 - **Reward:** Positive feedback.

Session 3: Calculating the Mean

➤ **Warm-Up (5 minutes):**

- **Activity:** Number Crunch
- **Description:** Quick mental addition and division.

➤ **Main Activity (25 minutes):**

- **Understanding the Mean:**
 - Explain that the mean is the total divided by the number of values.
- **Practice Problems:**
 - Calculate the mean from given data sets.
- **Real-Life Contexts:**
 - Use examples like average test scores or temperatures.

➤ **Sensory Break (5 minutes):**

- **Activity:** Stretch and Relax
- **Description:** Simple stretches.

➤ **Review and Reward (5 minutes):**

- **Activity:** Mean Challenge
- **Description:** Solve problems independently.
- **Reward:** Certificate or small prize.

Materials:

- Graph paper
- Protractors
- Coloured pencils or markers
- Data sets
- Calculators (if appropriate)

ADHD/ASC Strategies:

- **Hands-On Learning:** Engage in creating graphs.
- **Visual Supports:** Use clear examples and templates.
- **Positive Reinforcement:** Provide immediate praise.
- **Sensory Breaks:** Include movement and calming activities.

WEEK 23-24: REVIEW AND ASSESSMENT

Learning Objectives:

- Assess overall progress and reinforce learning objectives from the year.

ACTIVITIES:

Session 1: Comprehensive Review

- **Warm-Up (5 minutes):**
 - **Activity:** Mind Mapping
 - **Description:** Create a mind map of topics learned.
- **Main Activity (25 minutes):**
 - **Skill Stations:**
 - Set up stations for different topics (e.g., fractions, algebra).
 - The child rotates through stations, completing tasks.
 - **Games and Quizzes:**
 - Use educational games to review key concepts.
 - **Observation:**
 - Note strengths and areas needing improvement.
- **Sensory Break (5 minutes):**
 - **Activity:** Choice Time
 - **Description:** Allow the child to choose a preferred activity.
- **Review and Reward (5 minutes):**
 - **Activity:** Feedback Session
 - **Description:** Discuss how the child feels about their progress.
 - **Reward:** Positive affirmation and a small reward.

Session 2: Personalised Assessment

- **Warm-Up (5 minutes):**
 - **Activity:** Confidence Chart
 - **Description:** Rate confidence in different topics.
- **Main Activity (25 minutes):**
 - **Assessment Tasks:**
 - Provide a tailored assessment covering key areas.
 - **Supportive Environment:**
 - Ensure the child feels comfortable and understands that it's okay not to know everything.
 - **Encouragement:**
 - Offer support and hints as needed.
- **Sensory Break (5 minutes):**
 - **Activity:** Relaxing Music
 - **Description:** Listen to calming music.
- **Review and Reward (5 minutes):**
 - **Activity:** Celebrate Effort
 - **Description:** Highlight hard work and perseverance.
 - **Reward:** Certificate or special treat.

Session 3: Goal Setting and Celebration

- **Warm-Up (5 minutes):**
 - **Activity:** Favourite Memory Sharing
 - **Description:** Discuss favourite activities from the year.
- **Main Activity (25 minutes):**
 - **Setting Goals:**
 - Help the child set goals for the next academic year.
 - **Creating a Vision Board:**
 - Use pictures and words to represent aspirations.
 - **Celebration Activity:**
 - Have a small party or fun game to celebrate achievements.
- **Sensory Break (5 minutes):**
 - **Activity:** Free Play
 - **Description:** Allow time for unstructured play.
- **Review and Reward (5 minutes):**
 - **Activity:** Present Awards
 - **Description:** Give out certificates recognising various achievements.
 - **Reward:** Applause and acknowledgment.

Materials:

- Mind mapping sheets
- Assessment papers
- Confidence charts
- Vision board materials (magazines, glue, scissors)
- Certificates and rewards

ADHD/ASC Strategies:

- **Supportive Environment:** Ensure the child feels safe and encouraged.
- **Personalised Approach:** Tailor assessments to the child's needs.
- **Positive Reinforcement:** Focus on strengths and celebrate all progress.
- **Flexibility:** Be prepared to adjust activities based on the child's responses.

REVIEW AND PROGRESS MONITORING:

- **Weekly Assessments:**
 - Use informal methods like quizzes, discussions, and observations.
 - Provide opportunities for the child to demonstrate understanding in various ways.
- **Progress Charts:**
 - Maintain visual records of achievements.
 - Involve the child in tracking their own progress.
- **Adjustments:**
 - Be flexible with plans based on the child's engagement and comprehension.
 - Revisit challenging topics as needed.

ADDITIONAL SUPPORT FOR ADHD AND ASC:

1. **Personalised Breaks:**
 - Adapt break activities to suit the child's preferences.
 - Use timers to provide structure.
2. **Consistent Reinforcement:**
 - Establish clear expectations and consistent consequences.
 - Use positive reinforcement to encourage desired behaviours.
3. **Visual Timers and Schedules:**
 - Provide a visual timetable for each session.
 - Use timers to help the child anticipate transitions.
4. **Clear Communication:**
 - Use simple, direct language.
 - Check for understanding frequently.
5. **Environment Management:**
 - Minimise sensory distractions.
 - Provide a comfortable and familiar setting.
6. **Parental Involvement:**
 - Communicate regularly with caregivers.
 - Share strategies and progress to support learning at home.