1:1 YEAR 4 MATHS INTERVENTION PLAN FOR SEN STUDENTS

OBJECTIVE:

This intervention plan is tailored to help children with ADHD and ASC achieve the Year 4 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 the concept in a particular session when assessed, then the session should be repeated in later weeks for consolidation. This plan could also be adjusted for a small group of students if needed.

KEY MATHS SKILLS BASED ON YEAR 4 UK CURRICULUM:

1. Counting in multiples of 6, 7, 9, 25, and 1000.
2. Recognise the place value of each digit in four-digit numbers.
3. Finding 1000 more or less than a given number.
4. Rounding any number to the nearest 10, 100, or 1000.
5. Counting backwards through zero to include negative numbers.
6. Solving addition and subtraction two-step problems in contexts.
7. Recall multiplication and division facts up to 12 × 12.
8. Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
9. Recognise and show, using diagrams, families of common equivalent fractions.
10. Recognise and write decimal equivalents of any number of tenths or hundredths.
11. Compare numbers with the same number of decimal places up to two decimal places.
12. Convert between different units of measure (e.g., kilometre to metre; hour to minute).
13. Measure and calculate the perimeter and area of rectilinear figures.
14. Describe positions on a 2-D grid as coordinates in the first quadrant.
15. Interpret and present data using bar charts, pictograms, and time graphs.

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.

WEEK 1-2: COUNTING IN MULTIPLES AND PLACE VALUE

Learning Objective:

- Count in multiples of 6, 7, 9, 25, and 1000 from any given number.
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).
- Find 1000 more or less than a given number.

ACTIVITIES:

Session 1: Counting in Multiples of 6 and 7

- **Warm-Up (5 minutes):**
  - **Activity:** Jumping Jacks Counting
  - **Description:** Perform jumping jacks while counting in ones up to 20 to energise the child.
- **Main Activity (25 minutes):**
  - **Introduction:**
    - Explain the concept of multiples and how counting in steps can help in quick calculations.
  - **Counting with Number Lines:**
    - Use a large floor number line marked in intervals of 6 up to 60.
    - The child hops along the number line, saying each multiple aloud.
    - Repeat with multiples of 7, starting from different numbers (e.g., starting at 7 or 14).
  - **Interactive Game:**
    - Play "Multiples Catch," where the teacher says a number, and the child responds with the next multiple.
    - Use flashcards with numbers for visual support.
- **Sensory Break (5 minutes):**
  - **Activity:** "Simon Says" with Movements
  - **Description:** Incorporate commands that involve movements and counting.
- **Review and Reward (5 minutes):**
  - **Activity:** Quick Quiz
  - **Description:** Ask the child to write or say the next three multiples of a given number.
  - **Reward:** Provide a sticker or token for participation.

Session 2: Place Value of Four-Digit Numbers

- **Warm-Up (5 minutes):**
  - **Activity:** Place Value Bingo
  - **Description:** Use bingo cards with four-digit numbers; call out clues like "number with 5 in the hundreds place."
- **Main Activity (25 minutes):**
  - **Building Numbers:**
    - Use base-ten blocks (thousands cubes, hundreds flats, tens rods, ones units) to construct numbers.
    - Have the child build numbers you call out and identify the value of each digit.
  - **Place Value Chart:**
    - Introduce a place value chart up to thousands.
    - Practise writing numbers in standard form and expanded form.
  - **Interactive Matching:**
    - Match numeral cards to word form and expanded form cards.

- **Sensory Break (5 minutes):**
  - **Activity:** Stress Ball Squeeze
  - **Description:** Provide a stress ball for tactile stimulation.
- **Review and Reward (5 minutes):**
  - **Activity:** Flashcard Challenge
  - **Description:** Show flashcards with digits underlined; ask the child to state the place value.
  - **Reward:** Praise and a small treat.

Session 3: Finding 1000 More or Less

- **Warm-Up (5 minutes):**
  - **Activity:** Counting in Thousands
  - **Description:** Bounce a ball back and forth while counting in thousands up to 10,000.
- **Main Activity (25 minutes):**
  - **Number Line Exploration:**
    - Use a large number line from 0 to 10,000.
    - Place markers on numbers and find 1000 more or less.
  - **Spin and Solve Game:**
    - Use a spinner labelled with numbers (e.g., 2000 to 9000).
    - Spin to select a number and write down 1000 more and 1000 less.
  - **Real-Life Context:**
    - Discuss scenarios like population counts or distances to understand the concept of 1000 more or less.
- **Sensory Break (5 minutes):**
  - **Activity:** Deep Breathing with Counting
  - **Description:** Practise deep breaths while counting to calm and refocus.
- **Review and Reward (5 minutes):**
  - **Activity:** Create Your Own Problem
  - **Description:** Have the child come up with their own numbers and find 1000 more or less.
  - **Reward:** Acknowledgement and a sticker.

Materials:

- Large floor number lines
- Counters, beads, or small toys
- Base-ten blocks or place value counters
- Place value charts
- Flashcards with numbers and place values
- Spinners with numbers
- Ball for counting games

ADHD/ASC Strategies:

- **Movement Integration:** Incorporate physical activities like hopping or throwing to maintain engagement.
- **Visual Aids:** Use number lines, charts, and flashcards to support learning.
- **Hands-On Materials:** Provide tactile learning experiences with blocks and counters.
- **Short Tasks:** Break activities into small, manageable parts with clear goals.
- **Positive Reinforcement:** Use immediate praise and rewards to encourage participation.

WEEK 3-4: ROUNDING AND NEGATIVE NUMBERS

Learning Objective:

- Round any number to the nearest 10, 100, or 1000.
- Count backwards through zero to include negative numbers.

ACTIVITIES:

Session 1: Rounding to the Nearest 10 and 100

- **Warm-Up (5 minutes):**
  - **Activity:** Rounding Relay
  - **Description:** Run to the correct corner of the room labelled with "10" or "100" based on rounding clues.
- **Main Activity (25 minutes):**
  - **Introduction to Rounding Rules:**
    - Explain the concept of rounding using number lines and the rhyme "5 or more, let it soar; 4 or less, let it rest."
  - **Interactive Practice:**
    - Use rounding hills (visual diagrams) to show numbers rounding up or down.
    - Provide number cards; the child places them on the number line and rounds accordingly.
  - **Group Game:**
    - Play "Rounding Bingo" where rounded numbers are called out, and the child matches them to their original numbers.
- **Sensory Break (5 minutes):**
  - **Activity:** Stretch and Shake
  - **Description:** Simple stretches and shakes to reset.
- **Review and Reward (5 minutes):**
  - **Activity:** Quickfire Rounding Questions
  - **Description:** Oral quiz on rounding numbers.
  - **Reward:** Praise and a small token.

Session 2: Rounding to the Nearest 1000

- **Warm-Up (5 minutes):**
  - **Activity:** Rounding Song
  - **Description:** Sing a catchy song about rounding to make the concept memorable.
- **Main Activity (25 minutes):**
  - **Number Line Exploration:**
    - Use a large number line marked in thousands.
    - Place number cards on the line and discuss which thousand they are closest to.
  - **Real-Life Application:**
    - Discuss scenarios like estimating distances or populations.
    - Solve word problems involving rounding to the nearest 1000.
  - **Creative Activity:**
    - Make a rounding poster that summarises the rules and provides examples.

- **Sensory Break (5 minutes):**
  - **Activity:** Sensory Bin Exploration
  - **Description:** Allow time with a sensory bin filled with sand or rice.
- **Review and Reward (5 minutes):**
  - **Activity:** Rounding Challenge
  - **Description:** Timed activity to round as many numbers as possible.
  - **Reward:** Certificate or badge for completion.

Session 3: Counting Through Zero to Negative Numbers

- **Warm-Up (5 minutes):**
  - **Activity:** Temperature Talk
  - **Description:** Discuss weather temperatures and introduce the concept of below zero.
- **Main Activity (25 minutes):**
  - **Number Line with Negatives:**
    - Introduce a horizontal number line extending into negative numbers.
    - Use a character (e.g., a toy car) to move along the number line, counting forwards and backwards.
  - **Real-Life Context:**
    - Explore examples like bank accounts (overdrafts), lifts going below ground level, and temperatures.
  - **Interactive Game:**
    - Play "Integer Jump," where the child jumps forwards or backwards based on positive or negative prompts.
- **Sensory Break (5 minutes):**
  - **Activity:** Balloon Breathing
  - **Description:** Deep breathing while imagining inflating and deflating a balloon.
- **Review and Reward (5 minutes):**
  - **Activity:** Negative Number Quiz
  - **Description:** Solve simple addition and subtraction problems involving negatives.
  - **Reward:** Positive feedback and a small prize.

Materials:

- Number lines (including negatives)
- Rounding hills diagrams
- Number cards
- Bingo cards
- Sensory bin materials
- Thermometer images
- Toy car or character for number line

ADHD/ASC Strategies:

- **Engaging Activities:** Use songs, games, and interactive tasks to maintain interest.
- **Visual Supports:** Provide clear visual representations of concepts.
- **Real-Life Connections:** Relate maths concepts to real-world examples.
- **Sensory Integration:** Incorporate sensory activities to help with regulation.
- **Positive Reinforcement:** Acknowledge efforts with praise and tangible rewards.

WEEK 5-6: ADDITION, SUBTRACTION, MULTIPLICATION, AND DIVISION

Learning Objective:

- Solve addition and subtraction two-step problems in contexts.
- Recall multiplication and division facts up to 12 × 12.

ACTIVITIES:

Session 1: Solving Two-Step Problems

- **Warm-Up (5 minutes):**
  - **Activity:** Mental Maths Challenge
  - **Description:** Quick questions involving basic addition and subtraction.
- **Main Activity (25 minutes):**
  - **Understanding Word Problems:**
    - Introduce the steps to solve word problems: Read, Understand, Plan, Solve, Check.
  - **Bar Models:**
    - Use bar models to visualise problems.
    - Work through examples together, highlighting key information.
  - **Practice Problems:**
    - Provide a set of word problems for the child to solve with guidance.
- **Sensory Break (5 minutes):**
  - **Activity:** Movement Break
  - **Description:** Short dance or exercise routine.
- **Review and Reward (5 minutes):**
  - **Activity:** Discuss Solutions
  - **Description:** Go over answers and strategies used.
  - **Reward:** Praise and a sticker.

Session 2: Multiplication and Division Facts

- **Warm-Up (5 minutes):**
  - **Activity:** Times Table Chant
  - **Description:** Recite multiplication tables with rhythmic clapping.
- **Main Activity (25 minutes):**
  - **Flashcard Practice:**
    - Use flashcards to practise multiplication and division facts.
  - **Multiplication Grid:**
    - Complete a multiplication grid puzzle.
  - **Interactive Games:**
    - Play "Around the World," where the child answers facts to move forward.
    - Use online resources or apps for interactive practice.
- **Sensory Break (5 minutes):**
  - **Activity:** Multiplication Hopscotch
  - **Description:** Hop on a chalked grid while reciting facts.

- **Review and Reward (5 minutes):**
  - **Activity:** Timed Quiz
  - **Description:** Quick recall of facts within a set time.
  - **Reward:** Certificate for mastery.

Session 3: Applying Multiplication and Division

- **Warm-Up (5 minutes):**
  - **Activity:** Puzzle Solving
  - **Description:** Solve a crossword or word search with maths terms.
- **Main Activity (25 minutes):**
  - **Word Problems:**
    - Provide real-life scenarios requiring multiplication or division.
    - Use manipulatives like counters to represent the problems.
  - **Group Discussion:**
    - Talk through the problems, encouraging the child to explain their thinking.
  - **Game Play:**
    - Play "Maths Monopoly," where advancing on the board requires solving problems.
- **Sensory Break (5 minutes):**
  - **Activity:** Colouring Time
  - **Description:** Colour-by-number sheets where colours correspond to answers.
- **Review and Reward (5 minutes):**
  - **Activity:** Reflect on Learning
  - **Description:** Discuss what was enjoyable or challenging.
  - **Reward:** Small prize or extra playtime.

Materials:

- Bar model templates
- Flashcards
- Multiplication grids
- Counters or manipulatives
- Worksheets with word problems
- Games (e.g., Maths Monopoly)
- Colouring materials

ADHD/ASC Strategies:

- **Interactive Learning:** Incorporate games and technology.
- **Visual Aids:** Use models and charts to illustrate concepts.
- **Step-by-Step Guidance:** Break down problems into manageable steps.
- **Positive Reinforcement:** Acknowledge successes promptly.

WEEK 7-8: MULTIPLYING TWO-DIGIT AND THREE-DIGIT NUMBERS

Learning Objective:

- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.

ACTIVITIES:

Session 1: Introducing Column Multiplication

- **Warm-Up (5 minutes):**
  - **Activity:** Multiplication Quick Draw
  - **Description:** Solve simple multiplication problems as quickly as possible.
- **Main Activity (25 minutes):**
  - **Demonstration:**
    - Introduce column multiplication step-by-step on a whiteboard.
  - **Guided Practice:**
    - Work through problems together, emphasising place value.
    - Use colour-coding to differentiate between steps.
  - **Hands-On Activity:**
    - Use place value counters to represent the multiplication process physically.
- **Sensory Break (5 minutes):**
  - **Activity:** Number Yoga
  - **Description:** Form numbers with body poses.
- **Review and Reward (5 minutes):**
  - **Activity:** Check Work
  - **Description:** Review completed problems for accuracy.
  - **Reward:** Praise and a sticker.

Session 2: Multiplying Three-Digit Numbers

- **Warm-Up (5 minutes):**
  - **Activity:** Review Game
  - **Description:** Recap previous session with a matching game.
- **Main Activity (25 minutes):**
  - **Complex Problems:**
    - Introduce multiplication of three-digit numbers by one-digit.
  - **Practice:**
    - Provide worksheets with increasing difficulty.
    - Encourage the child to verbalise each step.
  - **Error Analysis:**
    - Go through common mistakes and how to avoid them.
- **Sensory Break (5 minutes):**
  - **Activity:** Playdough Numbers
  - **Description:** Create numbers with playdough.
- **Review and Reward (5 minutes):**
  - **Activity:** Self-Assessment
  - **Description:** Have the child rate their understanding.
  - **Reward:** Positive feedback and a small treat.

Session 3: Application Through Word Problems

- **Warm-Up (5 minutes):**
  - **Activity:** Maths Riddles
  - **Description:** Solve fun riddles involving multiplication.
- **Main Activity (25 minutes):**
  - **Problem-Solving Steps:**
    - Revisit the steps: Read, Understand, Plan, Solve, Check.
  - **Practical Examples:**
    - Use scenarios like shopping or building to create relatable problems.
  - **Visual Representation:**
    - Draw diagrams to represent problems.
- **Sensory Break (5 minutes):**
  - **Activity:** Mindfulness Minute
  - **Description:** Quiet time focusing on breathing.
- **Review and Reward (5 minutes):**
  - **Activity:** Share Solutions
  - **Description:** Discuss answers and methods used.
  - **Reward:** Certificate of achievement.

Materials:

- Whiteboard and markers
- Place value counters
- Worksheets
- Playdough
- Problem-solving charts

ADHD/ASC Strategies:

- **Visual and Kinaesthetic Learning:** Use manipulatives and visuals.
- **Clear Instructions:** Provide step-by-step guidance.
- **Positive Feedback:** Reinforce effort and progress.

WEEK 9-10: FRACTIONS AND DECIMALS

Learning Objective:

- Recognise and show, using diagrams, families of common equivalent fractions.
- Recognise and write decimal equivalents of any number of tenths or hundredths.

ACTIVITIES:

Session 1: Equivalent Fractions

- **Warm-Up (5 minutes):**
  - **Activity:** Fraction Flashcards
  - **Description:** Match fraction cards with visual representations.
- **Main Activity (25 minutes):**
  - **Fraction Wall:**
    - Build a fraction wall using coloured strips to show equivalent fractions.
  - **Hands-On Activity:**
    - Use pizza slices (paper cut-outs) to demonstrate how different fractions can represent the same amount.
  - **Interactive Game:**
    - Play "Fraction Snap," matching equivalent fractions.
- **Sensory Break (5 minutes):**
  - **Activity:** Musical Fractions
  - **Description:** Move to music, stopping when it pauses to answer fraction questions.
- **Review and Reward (5 minutes):**
  - **Activity:** Create Fraction Art
  - **Description:** Make a collage using fraction pieces.
  - **Reward:** Display the artwork.

Session 2: Fractions to Decimals

- **Warm-Up (5 minutes):**
  - **Activity:** Decimal Number Line
  - **Description:** Place decimal cards on a number line.
- **Main Activity (25 minutes):**
  - **Place Value Chart:**
    - Use charts to show tenths and hundredths places.
  - **Money Matters:**
    - Use coins to represent decimals (e.g., 10p = £0.10).
  - **Conversion Practice:**
    - Convert fractions like 3/10 to decimals (0.3).
- **Sensory Break (5 minutes):**
  - **Activity:** Decimal Dance
  - **Description:** Dance moves assigned to different decimal numbers.
- **Review and Reward (5 minutes):**
  - **Activity:** Decimal Bingo
  - **Description:** Mark off decimal numbers called out.
  - **Reward:** Small prize for completing a row.

Session 3: Comparing Decimals

- **Warm-Up (5 minutes):**
  - **Activity:** Ordering Game
  - **Description:** Arrange decimal cards from smallest to largest.
- **Main Activity (25 minutes):**
  - **Top Trumps Game:**
    - Use cards with decimals to play a game comparing values.
  - **Real-Life Application:**
    - Compare prices of items to understand decimal values.
  - **Visual Representation:**
    - Use base-ten blocks to model decimal numbers.
- **Sensory Break (5 minutes):**
  - **Activity:** Relaxation Exercise
  - **Description:** Guided imagery focusing on numbers.
- **Review and Reward (5 minutes):**
  - **Activity:** Reflective Discussion
  - **Description:** Talk about what was learned.
  - **Reward:** Praise and acknowledgement.

Materials:

- Fraction strips and walls
- Pizza slice cut-outs
- Place value charts
- Coins
- Decimal cards
- Base-ten blocks

ADHD/ASC Strategies:

- **Hands-On Learning:** Use manipulatives for tactile engagement.
- **Real-Life Contexts:** Relate concepts to everyday experiences.
- **Interactive Games:** Maintain interest through play.

WEEK 11-12: MEASUREMENT (UNITS, PERIMETER, AND AREA)

Learning Objective:

- Convert between different units of measure (e.g., kilometre to metre; hour to minute).
- Measure and calculate the perimeter and area of rectilinear figures.

ACTIVITIES:

Session 1: Unit Conversions

- **Warm-Up (5 minutes):**
  - **Activity:** Measurement Matching
  - **Description:** Match units with objects (e.g., litres with milk).
- **Main Activity (25 minutes):**
  - **Conversion Charts:**
    - Introduce charts for length, mass, and time.
  - **Practical Activity:**
    - Use measuring jugs, rulers, and clocks to convert units.
  - **Role-Play:**
    - Simulate a cooking activity requiring unit conversions.
- **Sensory Break (5 minutes):**
  - **Activity:** Movement Conversion
  - **Description:** Convert steps into metres by walking and measuring.
- **Review and Reward (5 minutes):**
  - **Activity:** Conversion Quiz
  - **Description:** Short quiz on unit conversions.
  - **Reward:** Sticker or token.

Session 2: Measuring Perimeter

- **Warm-Up (5 minutes):**
  - **Activity:** Perimeter Hunt
  - **Description:** Find objects with a particular perimeter.
- **Main Activity (25 minutes):**
  - **Measuring Shapes:**
    - Use rulers to measure sides of shapes drawn on paper.
  - **Outdoor Activity:**
    - Measure the perimeter of the playground or classroom.
  - **Calculation Practice:**
    - Add side lengths to find perimeters.
- **Sensory Break (5 minutes):**
  - **Activity:** Jump Rope Counting
  - **Description:** Count jumps while skipping rope.
- **Review and Reward (5 minutes):**
  - **Activity:** Perimeter Problems
  - **Description:** Solve word problems involving perimeter.
  - **Reward:** Positive feedback.

Session 3: Calculating Area

- **Warm-Up (5 minutes):**
  - **Activity:** Area Estimation
  - **Description:** Guess the area of objects before measuring.
- **Main Activity (25 minutes):**
  - **Counting Squares:**
    - Use grid paper to draw shapes and count squares for area.
  - **Real-Life Context:**
    - Discuss how area is used in real life (e.g., carpeting a room).
  - **Problem-Solving:**
    - Solve area calculation problems.
- **Sensory Break (5 minutes):**
  - **Activity:** Quiet Reading
  - **Description:** Read a book related to maths.
- **Review and Reward (5 minutes):**
  - **Activity:** Area Challenges
  - **Description:** Create shapes with a given area.
  - **Reward:** Display work.

Materials:

- Conversion charts
- Measuring tools (rulers, measuring jugs)
- Grid paper
- Worksheets
- Outdoor measuring equipment

ADHD/ASC Strategies:

- **Practical Application:** Use real objects for measurement.
- **Movement Activities:** Incorporate physical movement.
- **Clear Instructions:** Provide step-by-step guidance.

WEEK 13-14: COORDINATES AND DATA INTERPRETATION

Learning Objectives:

- Describe positions on a 2-D grid as coordinates in the first quadrant.
- Interpret and present data using bar charts, pictograms, and time graphs.

ACTIVITIES:

Session 1: Plotting Coordinates to Create Shapes or Pictures

- **Warm-Up (5 minutes):**
  - **Activity:** Directional Simon Says
  - **Description:** Play a game where the child follows directional commands (e.g., "step forward," "step left") to reinforce understanding of spatial concepts.
- **Main Activity (25 minutes):**
  - **Introduction to Coordinates:**
    - Explain the x-axis and y-axis on a grid.
    - Demonstrate how to read and write coordinates (e.g., (3, 2)).
  - **Treasure Map Activity:**
    - Provide a coordinate grid with a simple map.
    - The child plots given coordinates to find hidden "treasure."
  - **Creating Pictures:**
    - Provide a list of coordinates that, when connected, form a simple shape or picture (e.g., a house, a star).
    - The child plots the points and draws lines to reveal the image.
- **Sensory Break (5 minutes):**
  - **Activity:** Coordinate Grid Hop**
  - **Description:** Place a grid on the floor with tape; the child hops to called-out coordinates.
- **Review and Reward (5 minutes):**
  - **Activity:** Coordinate Quiz
  - **Description:** Ask the child to identify coordinates of given points or place a point at given coordinates.
  - **Reward:** Praise and a sticker or small token.

Session 2: Collecting Data and Creating Bar Charts and Pictograms

- **Warm-Up (5 minutes):**
  - **Activity:** Favourite Things Survey
  - **Description:** Quick survey on favourite colours, foods, or animals to generate data.
- **Main Activity (25 minutes):**
  - **Data Collection:**
    - Use the survey results to tally responses.
    - Introduce the concept of frequency.
  - **Creating Bar Charts:**
    - Demonstrate how to draw axes and label them.
    - The child uses the data to create a bar chart, colouring the bars for visual appeal.
  - **Making Pictograms:**
    - Explain pictograms and how each symbol represents a number of items.
    - The child creates a pictogram using symbols (e.g., smiley faces) to represent data.

- **Sensory Break (5 minutes):**
  - **Activity:** Movement Dice
  - **Description:** Roll a dice to perform different movements (e.g., jumping jacks, toe touches).
- **Review and Reward (5 minutes):**
  - **Activity:** Interpret Your Chart
  - **Description:** Ask questions about the data presented (e.g., "Which is the most popular colour?").
  - **Reward:** Positive feedback and display of work.

Session 3: Reading and Interpreting Time Graphs

- **Warm-Up (5 minutes):**
  - **Activity:** Time Telling Relay
  - **Description:** Quick game where the child matches analogue clocks to digital times.
- **Main Activity (25 minutes):**
  - **Understanding Time Graphs:**
    - Introduce time graphs and their components (time on the x-axis, data on the y-axis).
  - **Interpreting Graphs:**
    - Provide pre-made time graphs (e.g., temperature changes throughout the day).
    - Guide the child in reading the graph and extracting information.
  - **Question and Answer:**
    - Ask questions based on the graph (e.g., "What was the temperature at 2 pm?").
    - Encourage the child to ask their own questions about the data.
- **Sensory Break (5 minutes):**
  - **Activity:** Deep Breathing with Visualisation
  - **Description:** Practice deep breathing while visualising calming scenes.
- **Review and Reward (5 minutes):**
  - **Activity:** Create a Simple Time Graph
  - **Description:** Use collected data (e.g., heart rate after exercise) to create a time graph.
  - **Reward:** Certificate of achievement or extra choice time.

Materials:

- Coordinate grids (printed or drawn on paper) + Graph paper
- Data sets (from surveys or provided)
- Coloured pencils or markers
- Stickers or tokens for rewards
- Floor tape for grid hop activity
- Pre-made time graphs

ADHD/ASC Strategies:

- **Engaging Activities:** Use themes of interest (e.g., favourite characters) for plotting coordinates.
- **Visual Structure:** Provide clear, step-by-step instructions with visual aids.
- **Movement Integration:** Incorporate physical activities like grid hopping to maintain engagement.
- **Positive Reinforcement:** Provide immediate feedback and celebrate successes.

WEEK 15-16: REVIEW AND CONSOLIDATION

Learning Objective:

- Review and consolidate learning of challenging topics.

ACTIVITIES:

Session 1: Revisiting Multiplication and Division Concepts

- **Warm-Up (5 minutes):**
  - **Activity:** Times Table Treasure Hunt
  - **Description:** Hide times table facts around the room for the child to find and solve.
- **Main Activity (25 minutes):**
  - **Interactive Games:**
    - Play "Multiplication Bingo" using multiplication facts up to 12 × 12.
    - Use online interactive games to reinforce multiplication and division skills.
  - **Group Challenges:**
    - Solve puzzles that require applying multiplication/division in different contexts (e.g., magic squares).
- **Sensory Break (5 minutes):**
  - **Activity:** Dance Break
  - **Description:** Follow a simple dance routine to favourite music.
- **Review and Reward (5 minutes):**
  - **Activity:** Reflective Discussion
  - **Description:** Talk about which multiplication and division concepts are clear and which need more practice.
  - **Reward:** Praise and a small treat.

Session 2: Practising Fractions and Decimals

- **Warm-Up (5 minutes):**
  - **Activity:** Fraction Flashcards
  - **Description:** Quick-fire round matching fractions to decimal equivalents.
- **Main Activity (25 minutes):**
  - **Hands-On Activities:**
    - Use fraction circles or bars to visualise equivalent fractions.
    - Convert fractions to decimals using place value charts.
  - **Visual Aids:**
    - Create a fractions and decimals wall chart together.
  - **Games:**
    - Play "Fraction Dominoes" where the child matches equivalent fractions and decimals.
- **Sensory Break (5 minutes):**
  - **Activity:** Mindful Colouring
  - **Description:** Colour in fraction-themed pictures.
- **Review and Reward (5 minutes):**
  - **Activity:** Quiz Time
  - **Description:** Short quiz on fractions and decimals.
  - **Reward:** Sticker or extra playtime.

Session 3: Solving Mixed Problems in Real-Life Contexts

- **Warm-Up (5 minutes):**
  - **Activity:** Maths Word Search
  - **Description:** Find maths terms related to operations.
- **Main Activity (25 minutes):**
  - **Real-Life Scenarios:**
    - Present problems involving shopping budgets, cooking measurements, or travel times.
    - Encourage the child to identify which operations to use.
  - **Problem-Solving Steps:**
    - Reiterate the importance of understanding the problem, planning, solving, and checking.
  - **Role-Playing:**
    - Act out scenarios (e.g., running a shop) to make problems engaging.
- **Sensory Break (5 minutes):**
  - **Activity:** Stretching Exercises
  - **Description:** Gentle stretches to refocus.
- **Review and Reward (5 minutes):**
  - **Activity:** Share Solutions
  - **Description:** Discuss answers and reasoning.
  - **Reward:** Certificate of accomplishment.

Materials:

- Multiplication and division games
- Fraction circles/bars
- Place value charts
- Fraction and decimal wall chart materials
- Word problem worksheets
- Role-play props (e.g., toy money, shopping items)
- Colouring sheets

ADHD/ASC Strategies:

- **Tailored Activities:** Focus on areas where the child needs the most support.
- **Variety of Methods:** Use different teaching approaches to maintain interest.
- **Positive Feedback:** Celebrate small victories to boost confidence.

WEEK 17-18: ASSESSMENT AND REINFORCEMENT

Learning Objective:

- Assess overall progress and reinforce learning objectives.

ACTIVITIES:

Session 1: Informal Assessments Across Key Skills

- **Warm-Up (5 minutes):**
  - **Activity:** Brain Gym Exercises
  - **Description:** Simple movements to prepare the brain for thinking.
- **Main Activity (25 minutes):**
  - **Assessment Stations:**
    - Set up different stations focusing on various skills (e.g., multiplication, fractions).
    - The child rotates through stations, completing tasks or solving problems.
  - **Practical Tasks:**
    - Include hands-on activities like measuring objects or plotting coordinates.
  - **Observation:**
    - Note areas of strength and those needing improvement.
- **Sensory Break (5 minutes):**
  - **Activity:** Relaxation Time
  - **Description:** Listen to calming music or nature sounds.
- **Review and Reward (5 minutes):**
  - **Activity:** Self-Reflection
  - **Description:** Discuss how the child felt about each activity.
  - **Reward:** Positive affirmation and a small prize.

Session 2: Discussing Progress and Setting Goals

- **Warm-Up (5 minutes):**
  - **Activity:** Emotion Cards
  - **Description:** Use cards to express feelings about maths.
- **Main Activity (25 minutes):**
  - **Progress Review:**
    - Go over the progress chart with the child. + Highlight achievements and improvements.
  - **Strengths and Areas for Improvement:**
    - Encourage the child to identify what they enjoy and what they find challenging.
  - **Goal Setting:**
    - Set realistic and achievable goals for future learning.
    - Discuss strategies to overcome difficulties.
- **Sensory Break (5 minutes):**
  - **Activity:** Movement Activity
  - **Description:** Choose a preferred physical activity (e.g., ball toss, mini obstacle course).
- **Review and Reward (5 minutes):**
  - **Activity:** Goal Tracker
  - **Description:** Create a visual chart for new goals.
  - **Reward:** Special certificate or badge.

Session 3: Celebrating Achievements with a Fun Maths Activity

- **Warm-Up (5 minutes):**
  - **Activity:** Favourite Maths Game
  - **Description:** Let the child choose a preferred warm-up game.
- **Main Activity (25 minutes):**
  - **Maths Fair:**
    - Set up fun maths activities and games that incorporate various skills learned (e.g., maths puzzles, interactive games).
  - **Group Participation:**
    - If in a group setting, involve other students for social interaction.
  - **Certificates and Awards:**
    - Present personalised certificates recognising the child's efforts and achievements.
- **Sensory Break (5 minutes):**
  - **Activity:** Celebration Dance
  - **Description:** Play upbeat music and celebrate.
- **Review and Reward (5 minutes):**
  - **Activity:** Share Favourite Moments
  - **Description:** Discuss what the child enjoyed most over the past weeks.
  - **Reward:** Give a small gift or allow extra time on a preferred activity.

Materials:

- Assessment sheets tailored to key skills
- Progress charts
- Certificates and stickers
- Maths games and puzzles
- Emotion and goal-setting cards
- Reward items (e.g., badges, small toys)

ADHD/ASC Strategies:

- **Low-Pressure Environment:** Keep assessments informal to reduce anxiety.
- **Child Involvement:** Engage the child in discussions about their learning.
- **Celebrate Successes:** Recognise and reward effort and progress to build self-esteem.

REVIEW AND PROGRESS MONITORING:

- **Weekly Assessment:**
  - Continuously assess understanding through quizzes, discussions, and observations.
  - Use practical demonstrations to allow the child to showcase their skills.
- **Progress Tracker:**
  - Maintain a visual chart highlighting mastered skills.
  - Celebrate milestones with rewards to motivate continued effort.
- **Adjustment Based on Behaviour:**
  - Be flexible with session lengths and break times.
  - Revisit challenging concepts as needed, using different teaching methods if necessary.

ADDITIONAL SUPPORT FOR ADHD AND ASC:

1. **Personalised Breaks:**
    - Tailor breaks to suit the child's preferences, whether they need to expend energy or have quiet time.
    - Use visual timers to set clear expectations for break durations.
2. **Consistent Reinforcement:**
    - Implement a structured reward system.
    - Offer immediate and specific praise to reinforce positive behaviours and accomplishments.
3. **Visual Timers and Schedules:**
    - Provide a clear visual schedule for each session.
    - Use timers to help the child anticipate transitions and manage time effectively.
4. **Clear Communication:**
    - Use straightforward language and repeat instructions if necessary.
    - Encourage the child to ask questions to ensure understanding.
5. **Environment Management:**
    - Minimise distractions by creating a quiet and organised workspace.
    - Consider sensory needs, such as lighting and seating arrangements.
6. **Parental Involvement:**
    - Share progress and strategies with parents or carers.
    - Provide suggestions for supportive activities at home.