1:1 YEAR 2 MATHS INTERVENTION PLAN FOR SEN STUDENTS

OBJECTIVE:

This intervention plan is tailored help children with ADHD and ASC to achieve the Year 2 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 2 UK CURRICULUM:

1. Counting in steps of 2, 3, and 5 from 0, and in 10s from any number.
2. Recognise the place value of each digit in a two-digit number.
3. Addition and subtraction up to 100.
4. Recall and use multiplication and division facts for 2, 5, and 10.
5. Identify, represent, and compare numbers using <, >, and =.
6. Understand fractions (½, ¼, ⅓, and ¾).
7. Recognise and describe properties of 2D and 3D shapes.
8. Measure length, mass, temperature, and capacity using standard units.
9. Tell the time to the nearest 5 minutes.

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 STEPS OF 2, 3, 5, AND 10

Learning Objective:

- Count forwards and backwards in steps of 2, 3, and 5 from 0.
- Count in tens from any given number.

Activities:

- **Session 1**: Count in steps of 2 using counters or small toys. Use a number line to visually see the jumps between numbers.
- **Session 2**: Practice counting in 5s by clapping or jumping while counting.
- **Session 3**: Play a game with flashcards: the child picks a card with a number on it and counts in 10s starting from that number.

Materials:

- Counters, blocks or small toys
- Number flashcards (1-20) – if unavailable, staff can print off numbers and laminate them.
- Number line card

ADHD/ASC Strategies:

- Use movement (e.g., jumping while counting) to integrate physical activity.
- Provide visual aids like number lines to reinforce patterns.
- Keep tasks short and include sensory breaks after each counting exercise.

WEEK 3-4: PLACE VALUE (TWO-DIGIT NUMBERS)

Learning Objective:

- Recognise the place value of each digit in two-digit numbers (tens and ones).

Activities:

- **Session 1**: Use place value blocks or bead strings to build numbers. Ask the child to separate tens and ones (e.g., 42 = 4 tens, 2 ones).
- **Session 2**: Number card sorting: Match numbers to their tens and ones representation.
- **Session 3**: Play a "Build a Number" game where the child selects cards to create a two-digit number and explains the value of each digit.

Materials:

- Place value blocks or bead strings
- Number cards (10-99) – if unavailable, staff can print numbers off and laminate them.
- Whiteboard for drawing tens and ones

ADHD/ASC Strategies:

- Use hands-on materials to make abstract concepts more concrete.
- Incorporate movement by allowing the child to physically sort and build numbers.
- Offer rewards for completing each task to keep motivation high.

WEEK 5-6: ADDITION AND SUBTRACTION (WITHIN 100)

Learning Objective:

- Solve addition and subtraction problems within 100 using various methods (e.g., number line, mental maths, and written methods).

Activities:

- **Session 1**: Use a number line to solve simple addition problems (e.g., 23 + 15). The child physically jumps along the number line while adding.
- **Session 2**: Introduce subtraction using cubes or blocks to visually "take away" from a number.
- **Session 3**: Solve word problems involving addition and subtraction, using manipulatives to support understanding.

Materials:

- Number line
- Cubes or counters
- Word problem cards

ADHD/ASC Strategies:

- Break problems into small, manageable steps.
- Use visual aids like number lines or blocks to reduce frustration.
- Provide choice in activities to allow some control, such as solving word problems or working with cubes.

WEEK 7-8: MULTIPLICATION AND DIVISION (2, 5, AND 10)

Learning Objective:

- Recall and use multiplication and division facts for the 2, 5, and 10 times tables.

Activities:

- **Session 1**: Use arrays of objects (e.g., 3 groups of 5 counters) to demonstrate multiplication.
- **Session 2**: Use division by sharing objects (e.g., 10 counters shared between 2 people) and relate it to multiplication.
- **Session 3**: Play a multiplication and division card game where the child matches problems to their solutions (e.g., $2 \times 5 = 10$).

Materials:

- Counters or buttons
- Multiplication flashcards
- Whiteboard for drawing arrays

ADHD/ASC Strategies:

- Keep activities tactile and visual with the use of objects.
- Offer rewards for completing times table challenges.
- Use movement-based activities (e.g., counting while jumping) to reinforce learning.

WEEK 9-10: COMPARING NUMBERS USING <, >, AND =

Learning Objective:

- Compare and order numbers using the symbols <, >, and =.

Activities:

- **Session 1**: Use number cards and ask the child to compare two numbers, writing the correct symbol between them.
- **Session 2**: Use a number line to demonstrate how numbers are ordered and how to compare them.
- **Session 3**: Play a "Greater or Less" game where the child rolls two dice, writes the numbers, and decides which is greater or less.

Materials:

- Number cards
- Number line
- Dice for games

ADHD/ASC Strategies:

- Provide visual representations of numbers to support comparisons.
- Break tasks into manageable steps, using one symbol (<, >, =) at a time.
- Offer movement-based activities (e.g., jumping to the greater number on a floor number line).

WEEK 11-12: FRACTIONS (½, ¼, ⅓, AND ¾)

Learning Objective:

- Understand and use simple fractions (½, ¼, ⅓, and ¾) in different contexts.

Activities:

- **Session 1**: Use playdough or paper circles to show how shapes can be divided into halves, thirds, and quarters.
- **Session 2**: Use fraction cards to match pictures of fractions to their correct names (e.g., ½, ¼).
- **Session 3**: Play a fraction sorting game where the child sort objects or shapes into groups (e.g., ½, ⅓, ¼).

Materials:

- Playdough or paper for cutting shapes
- Fraction flashcards
- Fraction sorting game materials

ADHD/ASC Strategies:

- Use hands-on activities like cutting shapes to make fractions tangible.
- Provide a reward system for correctly identifying and using fractions.
- Break down instructions into small steps and use visuals to support understanding.

WEEK 13-14: RECOGNISING 2D AND 3D SHAPES

Learning Objective:

- Identify and describe the properties of 2D and 3D shapes.

Activities:

- **Session 1**: Use 2D shape cutouts to identify and name shapes (e.g., circle, square, triangle).
- **Session 2**: Use 3D shape models to explore faces, edges, and vertices.
- **Session 3**: Play a shape-hunting game around the room to find real-life examples of 2D and 3D shapes.

Materials:

- 2D shape cutouts
- 3D shape models
- Shape posters

ADHD/ASC Strategies:

- Use tactile materials like 3D models to keep the child engaged.
- Incorporate movement by having the child find shapes around the room.
- Use a sticker chart to reward completion of shape identification tasks.

WEEK 15-16: MEASURING LENGTH, MASS, TEMPERATURE, AND CAPACITY

Learning Objective:

- Measure and compare length, mass, temperature, and capacity using standard units.

Activities:

- **Session 1**: Use a ruler to measure objects around the room in centimetres.
- **Session 2**: Use scales to compare the mass of different objects (e.g., toys, books).
- **Session 3**: Measure capacity by pouring water into different containers and comparing.

Materials:

- Ruler
- Scales
- Measuring cups and jugs for capacity

ADHD/ASC Strategies:

- Keep activities hands-on by involving physical measuring tasks.
- Use visual aids like charts to record measurements.
- Offer frequent breaks to maintain focus, especially during longer measuring activities.

WEEK 17-18: TELLING THE TIME (NEAREST 5 MINUTES)

Learning Objective:

- Tell the time to the nearest 5 minutes on an analogue clock.

Activities:

- **Session 1**: Use a toy clock to set and read "o'clock" and half-hour times.
- **Session 2**: Introduce reading times to the nearest 5 minutes using the toy clock.
- **Session 3**: Play a time-matching game with flashcards (e.g., matching 3:15 with a picture of a clock showing that time).

Materials:

- Toy clock with moveable hands
- Time flashcards

ADHD/ASC Strategies:

- Use movement (e.g., setting the clock by physically moving its hands) to engage the child.
- Provide a visual timer during the session to reinforce the concept of time.
- Offer a choice of different time-based games to give the child some control over the learning process.

REVIEW AND PROGRESS MONITORING:

Weekly Assessment:

- Each week, assess progress informally by asking the child to explain or demonstrate what they've learned. Use quick quizzes, verbal questions, or practical demonstrations.

Progress Tracker:

- Use a visual chart to track the child's mastery of each skill, giving them a visual representation of their progress.

Adjustment Based on Behaviour:

- Adjust the session length or frequency of breaks depending on the child's engagement. If the child struggles with a concept, extend the focus on that skill over multiple weeks.

ADDITIONAL SUPPORT FOR ADHD AND ASC:

1. **Personalised Breaks**:
    - Tailor sensory breaks to the child's needs, offering movement-based breaks or calming activities as needed. Use visual timers to make the duration of breaks predictable.
2. **Consistent Reinforcement**:
    - Implement a reward system (e.g., sticker charts, points) for task completion. Provide praise and tangible rewards to encourage positive behaviour and learning.
3. **Visual Timers and Schedules**:
    - Use visual schedules and timers to help the child anticipate the flow of the session and manage time more effectively, reducing anxiety around transitions.