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| **Experiences and Outcomes (Bundled)** |
| **MNU 3-03a** I can use a variety of methods to solve number problems in familiar contexts, clearly communicating my processes and solutions.**MNU 3-07a** I can solve problems by carrying out calculations with a wide range of fractions, decimal fractions and percentages, using my answers to make comparisons and informed choices for real-life situations.**MNU 3-09a** When considering how to spend my money, I can source, compare and contrast different contracts and services, discuss their advantages and disadvantages, and explain which offer best value to me.**MNU 3-09b** I can budget effectively, making use of technology and other methods, to manage money and plan for future expenses.**MNU 3-11a** I can solve practical problems by applying my knowledge of measure, choosing the appropriate units and degree of accuracy for the task and using a formula to calculate area or volume when required.**MNU 3-11b** Having investigated different routes to a solution, I can find the area of compound 2D shapes and the volume of compound 3D objects, applying my knowledge to solve practical problems. |
| **Learning Intentions (Broad to fit with Es and Os)** | **Success Criteria (created with children)** |
| 1. I can select the most appropriate strategy to solve a calculation;
2. I can work out addition and subtraction calculations using formal methods and a range of mental strategies;
3. I can interpret and solve multi-step problems, ensuring the correct order of operations;
4. I can use my knowledge of percentages to carry out calculations with or without a calculator;
5. I can communicate and justify the strategy I have used to solve the problem;
6. I can choose the best value for money and justify my choice;
7. I can compare deals and offers and talk about what represents best value;
8. I can calculate the area of a 2D shape;
9. I can convert between standard units when solving calculations involving measurement;
10. I can use a formula to calculate the area of parallelograms, rhombuses and kites.
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| **Assessment – Ongoing/Hinge Questions (Numbers indicate the Learning Intentions)** | **Assessment – Holistic Assessment for end of unit of work** |
| How are you going to solve this problem?What operation will you require to use?How do you know that this will work?Can you prove to me that will work?Are there any materials which could help you solve this problem? Could you act this out or draw a picture to help you? Are there any words which might give you a clue to the operation to use? Can you estimate what you think the answer roughly might be? Read the problem again. Does your answer make sense? Do you need to use any particular units? Is the question about people, pounds, boxes, teams or something else?There are 40 children in P5, 20 of them have shoe size 4. What percentage is this? How many different ways could you calculate the answer to this question? What is $\frac{1}{4}$ as a decimal fraction and as a percentage? Where do you see percentages used in everyday life? When would you need to be able to work out a percentage of something?A tin of beans costs 60p and they are available on a ‘three for the price of two’ offer. How much does one tin cost in the offer? Would you buy the single tin of beans or thee for the price of two? Why? When might a ‘three for two’ offer not be useful to the buyer? What do reduce and reduction mean?How many cms are there in 1.63m? How many mms? How did you work that out?How do you find the area of a compound shape?What do we need to consider when we try to solve a problem involving measure?What maths will you use to solve this problem?Does that answer make sense? | Skye has just purchased a new house and decides she would like to have her garden designed as demonstrated in the diagram. She has sourced two companies to lay the grass. She is provided with the following quotes. **Grassroots**Grass: £6.50 per square metreAstrograss: £9.50 per square metreLabour cost: £150**Supergrass**Grass: £7.50 per square metreAstrograss: £11.50 per square metreLabour: Included in costThe premium hardwood timber decking she wants costs £35 per square metre. The labour cost to fit the decking is £350. She has managed to get the pond prices and fitted for £300.Skye has set herself a budget of £1600. However she has her heart set on astrograss. She is willing to go 20% over budget if she can get the astrograss.Can she afford to get everything including the astrograss? Is so, which company should she go with? If not, what is her best option?Pupils should refer to the diagram to help complete the task. |
| **Planned Activities** | **Evaluation and Reporting (Against LIs and Success Criteria)** | **Next Steps** |
| **SAY**  |  |  |
| **WRITE**  |  |
| **MAKE** |  |
| **DO** |  |

2 m

10 m

3 m

250 cm

4 m

1.5 m

3.5 m

2 m

450 cm

2.5 m

Lawn

Pond

Decking