|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit Title**  **Special Numbers** | **Lesson Focus**  **(and number in sequence)**  **Prime Numbers (with squares and cubes)** | **Class name/year** | **Lesson date** | **Period** | **Name** |
| **Links to targets identified from previous Lesson Evaluation and/or Weekly Review**  **KS2 syllabus includes Prime Numbers.** | | | | | |
| **Learning Objectives**  To identify and use different types of Special Numbers, as well as be able to explain what makes a Prime Number.  *The ideas/concepts, skills and subject material you aim to teach* | | | **Learning Outcomes**  *All* **Explain different types of numbers.**  *Most* **Be able to explain the difference between Prime and Composite Numbers.**  *Few* **Work with all types of numbers and identify which numbers belong to which special group.**  *What the students will have learned during the lesson* | | |
| **Inclusion strategies**  As a lot of movement will be happening in the class, identify which students may have physical requirements (hearing/movement problems).  Differentiation;   * Starter- work with pupils who struggle with reading/writing, and have a keyword sheet ready with pictures to explain the definitions. * Maze has 2 sheets – 1 Prime, 1 Composite. If student has finished within the time, ask student to design their own to test peers. * Mini murder mystery – Extension task at the end of the task. * Top Trumps – Can you make the ultimate card?   *Groups or individuals with specific needs (initials only), differentiation, TA deployment* | | | **Health and safety and wellbeing**  A lot of movement, ensure tables are spaced well apart with easy access.  Murder mystery task includes murder, take care in case of special cases in class. | | |
| **Resources checklist**   * 1-100 grid for starter. * Mini Murder mystery laminated card. * Top Trump Cards. * Prime Number Maze sheets. * Pens and Paper for extension tasks. * Keywords sheet for pupils who struggle with reading/writing. * Each table has an instruction sheet. | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Time** | **Learning** | **Management** | Differentiation | Assessment for Learning |
|  | *What do we want the pupils to learn?*  *For each task what are the main learning points (skills, Knowledge, understanding)?* | *How will I organise the class and resources? What key instructions are needed? What will the class be doing?* | *For the main tasks, how will I adapt the task to make sure that all pupils are challenged?* | *How do I know if they have learnt? What strategies will I use to check this?* |
| 10 mins | - The pupils will recap/learn the prime numbers up to 100, by identifying all the composite numbers in the shading task.  - From here an open discussion will lead to what are the numbers left? What do they have in common and what are they called.  - From here a brief recap on square numbers and cube numbers to set the pupils up for the following tasks. | - Instructions are on the 1-100 grid, with colouring pencils being placed on table for shading.  - After discussion on Prime Numbers and other Special Numbers definitions written on board for pupils to write in their Keywords book for future reference.  - Keep keywords on board for activities. | - If pupil’s complete activity quickly, ask them to discuss with partner what numbers are left, and what the differences are.  - For pupils who have reading difficulties work through the task with them to begin with, so they can see what they’re doing.  - If these pupils will struggle to write keywords then have some sheets with the definition wrote on for them to stick in book. | Q&A for what they can see on the grid.  Ask students to identify a Square or Cube number. |
| 45 mins | Activity Workstations.  - 3 different tables set up for different learners.  -Table 1 – Focus on Maze’s. Can you tell the difference between Prime and Composite Numbers? If students manage these 2 tasks let them play Top Trumps.  - Table 2 – Start with Maze’s. After this set up with murder mystery.  - Table 3 – Murder Mystery task, if extension is finished then go on to Top Trumps.  Main learning points is to identify the Prime Numbers, (inc Special Numbers) and to be able to use them in tasks. | 3 Table packs, with resources and instruction sheet.  Class will be working in their groups on the activities with teacher encouraging open discussion between them. | - Packs are ability based, (Table 1 low, 2 mid , 3 high)  -Extension for table 1 – Top Trumps or design their own maze.  - Extension for table 2 – Make their own maze, or extension task on murder mystery sheet.  - Extension for table 3 – If extension on muder mystery is complete, ask them to design their own ultimate top trumps card. | - If they have managed to reach the goal (i.e complete maze or murder mystery) then they have encompassed all the objectives.  - If they get onto the extension tasks in which they must design their own students will have transferred knowledge into their own creation.  - If a pupil on the table is struggling, get peers to explain to show understanding. |
| 5 mins | What have we learnt today?  Each pupil is asked to write down one key thing they have learnt today. | 2 minutes to think of something they’ve learnt, then teacher picks 2 or 3 pupils to tell them what they’ve learnt.  Collaborate with objectives to show students what they’ve achieved. | Each student will have learnt something, no matter what level it is. | Students will tell teacher what they’ve learnt. |

**Lesson evaluation - to be completed after teaching this lesson. Reflect on what you did that either enabled or hampered learning**.

|  |
| --- |
| **Pupil progress** |
| *Did you achieve your SMART targets? Did the pupils meet the learning outcomes? How do you know?* |
| **Action to take next lesson with the class a) to improve my teaching and b) to improve the learning. Please refer to the Profile Characteristics.** |
|  |