|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date and time Friday 14th Feb 2020 | | Class/period P3 & P4 F block | | Lesson number 1 of 2 |
| Medium term planning context (include relevant prior learning and barriers/misconceptions):  Further understanding of Object-Orientation. | | | | |
| Learning Objectives: *To learn/understand/practice*  Pseudocode so that they start to answer exam Qs  Moving from the Greenfoot platform to using the NetBeans IDE to write pure Java code. | | | | |
| (Visible) Learning Outcomes: *By the end of the lesson pupils will have…. /pupils will be able to...*  Anything to do with pseudocode?  Or NetBeans?  Be able to implement a class in Java. Be able to instantiate an object and call a method on it. Start to understand how inheritance is implemented in Java. | | | | |
| Resources:  Slides and NetBeans/Java tutorials on the VLE. | | | | |
| Differentiation: (include SEN, stretch & challenge, TA deployment):  Much of the learning is self-paced with support available from me if required.  What stretch activities are there? And any additional support available?  Are there any students that might need either of these? | | | | |
| Homework:  No 17. Already set on Teams. Own Greenfoot game and OO ‘A’ level questions.  Any actions needed for last week’s homework? | | | | |
| Personal targets: Work on classroom management TS7. | | | | |
| Time  (mins) | What is going on? | | What should pupils be learning?  *How do you know that they are? (Assessment)* | |
| 5 | Register and welcome  I suggest you start with the brief recall test based on the OO terms homework that we talked about – they could be doing this as you do the register and prepare to present the next session. You can then mark this and see what it tells you about what they do and do not know and can inform your next steps planning | |  | |
| 5 | Introduction to Java and NetBeans  What are you going to show them here? Needs to be short | | Java and NetBeans basics | |
| 10 | Introduction to the shapes example and representing classes in pseudocode  Make sure they write down the pseudocode examples so they can use them in exercise that follows  Check what they write for the exercise and correct mistakes as a class – point out misconceptions. They must write the pseudcode out in full before they move on. | | Thinking about classes in pseudocode and how they are represented in Java. | |
| 70 | Completing the shapes example on paper | | Gaining practical experience | |
| 15 | break | | Regaining some mojo | |
| 40 | ~~Complete Tutorial 5: Inheritance and Polymorphism + extension task if time~~  Probably best to skip this till they have learned some Java and move straight on to the MOOC  Keep it for later though!! | | Gaining practical experience | |
| 40 | Perhaps show them how to get into and create a java program in NetBeans here so they don’t forget  Introduce the Helsinki MOOC resources and point to the worksheet.  Use the Getting started in NetBeans worksheet (currently hidden from students)  They will need to have done some of this to be able to implement the Shapes in Java – maybe do this straight after half term as a reminder of NetBeans | | Developing basic Java programming skills. | |

**Immediate reflections**: what do you need to consider next lesson to secure pupil progress?

(Use the Teachers’ Standards to guide this)

**Link to Abyasa**: reflections from this lesson against your progress/weekly targets

(Use the Teachers’ Standards to guide this)

**Consider the following questions to help you reflect:**

* To what extent did pupils make progress in relation to the learning outcomes?
* How do you know? (What did progress look like?)
* What did you do to enable this?
* What might you do differently and why?
* What were the conceptually challenging areas of learning in this lesson?
* What will you do next?