Each slideshow lesson takes the following format...

Slide 1

- Subject Area, Chapter and Part (Lesson Title).
- Quick links to specific parts of the lesson.
- Links back to this page appear regularly throughout the lesson.
- Calculator / Non-Calculator. This indicates whether a calculator is necessary or not for most of the questions, it acts as a guidance only.

NUMBER Chapter 4: Fractions Part 3: Ordering Fractions Starter Video Worksheet - I'm giving it a try! Worksheet - I'm ready for anything! Extension Homework

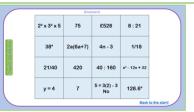
Slide 2

- Starter task.
- Questions relating to 16 different areas of core skills relevant to that level.
- Beneficial for a productive start to a lesson whilst promoting retrieval of previous learning.

Write 180 a product of prime factors | Factors

Slide 3

Solutions to slide 2.

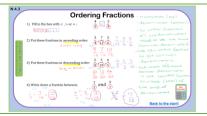


Slide 4

- Notes page, these questions are discussed and completed in the video.
- Questions get progressively more difficult and directly relate to the differentiated tasks in slides 6-11.
- Link to detailed, pre-recorded video.

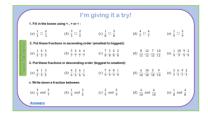
Slide 5

 Annotated notes and questions from slide 4 and as discussed in the video.



Slide 6

- 'I'm giving it a try!'
- The first, and most straight-forward, of the 3 tasks.
- These differentiated tasks allow students to build up their confidence as they progress through the different levels of difficulty.
- Many of these first tasks start with questions that are similar where only small details are changed, this helps students to develop a deeper mathematical understanding.



Slide 7

- Solutions to slide 6.
- Students are prompted to evaluate their own understanding and confidence after each of the 3 tasks with space to make reflective notes and stars to shade creating a clear visual selfassessment.



Slide 8

- 'I'm building my confidence!'
- The second, and slightly more difficult, of the 3 tasks.
- These differentiated tasks allow students to build up their confidence as they progress through the different levels of difficulty.



Slide 9

- Solutions to Slide 8.
- Students are prompted to evaluate their own understanding and confidence after each of the 3 tasks with space to make reflective notes and stars to shade creating a clear visual selfassessment.



Slide 10

- 'I'm ready for anything!'
- The third, and most challenging, of the 3 tasks.
- These differentiated tasks allow students to build up their confidence as they progress through the different levels of difficulty.



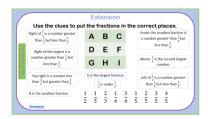
Slide 11

- Solutions to slide 10.
- Students are prompted to evaluate their own understanding and confidence after each of the 3 tasks with space to make reflective notes and stars to shade creating a clear visual selfassessment.



Slide 12

- Extension task.
- This task could be a problem-solving task, a puzzle, or an openended task, an exam-style question, a real-life context (bigger picture) question, or a task that interleaves the topic being learnt with other areas of Mathematics.
- The extension tasks are written to provide challenge and encourage deep-thinking, giving students an opportunity to apply their knowledge to more complex questions.



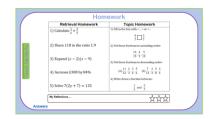
Slide 13

Solutions to slide 12.



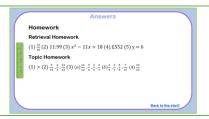
Slide 14

- Homework task comprising of 2 halves.
- 5 core skills questions relevant to that level.
- A task relating to the lesson. This section is often very similar to the questions that were on slides 4 and 5 and discussed during the video. Students, if struggling with the homework, can rewatch the video thus promoting independent learning.
- Students are, once again prompted to evaluate their own understanding and confidence with space to make reflective notes and stars to shade creating a clear visual self-assessment.



Slide 15

Solutions to slide 14.



Each accompanying worksheet takes the following format...

Note: each section of the worksheet appears on a separate page.

This is to allow for individual choice when printing.

Page 1 Ordering Fractions X Student copy of the notes page seen in the video and on slides 4/5. fractions in ascending order: $\frac{3}{4}$, $\frac{7}{12}$, $\frac{5}{6}$ Lesson title and code appears on all worksheet pages. QR code link to detailed, pre-recorded video. sending order: $\frac{2}{3}$, $\frac{5}{10}$, $\frac{4}{5}$ Calculator / Non-Calculator. This indicates whether a calculator is a fraction between: $\frac{1}{2}$ and $\frac{3}{2}$ necessary or not for most of the questions, it acts as a guidance only. Page 2 Student copy of 'I'm giving it a try!' The first, and most straight-forward, of the 3 tasks seen on slide 6. 1. Put these tractions in according order (unstant to biggious): $[a] \ \frac{1}{9} \cdot \frac{4}{5} \cdot \frac{9}{5} \cdot (3) \ \frac{5}{7} \cdot \frac{2}{7} \cdot \frac{6}{7} \cdot 4 \cdot (4) \ \frac{7}{9} \cdot \frac{9}{6} \cdot \frac{4}{9} \cdot \frac{2}{9} \cdot (6) \ \frac{8}{12} \cdot \frac{12}{12} \cdot \frac{7}{12} \cdot \frac{39}{12} \cdot (4) \ \frac{1}{9} \cdot \frac{10}{9} \cdot \frac{9}{5} \cdot \frac{2}{9}$ with self-evaluation section seen on slide 7. $\begin{array}{ll} \text{Put these fractions in descending order (higgest to smallest):} \\ \text{(a)} \quad \frac{4}{3}, \frac{1}{5}, \frac{9}{5}, \text{(b)} \quad \frac{4}{3}, \frac{2}{5}, \frac{6}{3}, \frac{1}{6}, \text{(c)} \quad \frac{7}{7}, \frac{6}{7}, \frac{9}{7}, \frac{1}{7}, \frac{1}{9}, \text{(d)} \quad \frac{5}{10}, \frac{9}{10}, \frac{9}{10}, \text{(e)} \quad \frac{9}{7}, \frac{6}{7}, \frac{9}{7}, \frac{1}{7}, \frac{9}{7}, \frac{1}{9}, \frac{9}{10}, \frac{9$ With down a Katton between: $(s) \ \frac{1}{2} \ and \ \frac{1}{2} \ (b) \ \frac{1}{6} \ and \ \frac{1}{8} \ (c) \ \frac{2}{9} \ and \ \frac{1}{9} \ (d) \ \frac{4}{10} \ and \ \frac{6}{10} \ (s) \ \frac{1}{8} \ and \ \frac{4}{8}.$ Page 3 Student copy of 'I'm building my confidence!' The second, and slightly more difficult, of the 3 tasks seen on $(a) \ \frac{1}{2} \cdot \frac{3}{4} \cdot \frac{1}{4} \cdot (b) \ \frac{2}{3} \cdot \frac{2}{9} \cdot \frac{5}{9} \cdot \frac{1}{3} \cdot (c) \ \frac{3}{4} \cdot \frac{3}{8} \cdot \frac{2}{4} \cdot \frac{5}{8} \cdot (d) \ \frac{7}{29} \cdot \frac{4}{20} \cdot \frac{6}{20} \cdot \frac{1}{4} \cdot (e) \ \frac{1}{2} \cdot \frac{5}{9} \cdot \frac{3}{4} \cdot \frac{3}{8}$ slide 8 with self-evaluation section seen on slide 9. $(a) \stackrel{4}{=} \stackrel{7}{=} \stackrel{1}{=} \stackrel{1}{=} (b) \stackrel{7}{=} \stackrel{5}{=} \frac{3}{10} \stackrel{3}{=} \stackrel{1}{=} (c) \stackrel{2}{=} \stackrel{1}{=} \stackrel{4}{=} \stackrel{1}{=} (c) \stackrel{11}{=} \stackrel{3}{=} \stackrel{3}{=} \stackrel{3}{=} (c) \stackrel{7}{=} \stackrel{7}{=} \stackrel{7}{=} \stackrel{2}{=} \stackrel{2}{=} \stackrel{2}{=} (c) \stackrel{7}{=} \stackrel{7}{=} \stackrel{7}{=} \stackrel{7}{=} \stackrel{3}{=} \stackrel{3}{=} (c) \stackrel{7}{=} \stackrel{7}{=} \stackrel{7}{=} \stackrel{7}{=} \stackrel{7}{=} \stackrel{2}{=} \stackrel{2}{=} \stackrel{2}{=} (c) \stackrel{7}{=} \stackrel{$ (a) $\frac{1}{6}$ and $\frac{1}{2}$ (b) $\frac{2}{8}$ and $\frac{6}{10}$ (c) $\frac{2}{9}$ and $\frac{2}{3}$ (d) $\frac{9}{12}$ and $\frac{8}{3}$ (e) $\frac{5}{16}$ and $\frac{1}{2}$ Page 4 Student copy of 'I'm ready for anything!' 1. FM in the boson using 4, 2 or 4: (a) $\frac{2}{5}$ □ $\frac{2}{5}$ (b) $\frac{4}{5}$ □ $\frac{2}{5}$ (c) $\frac{1}{5}$ □ $\frac{2}{5}$ (d) $\frac{5}{12}$ □ $\frac{2}{5}$ (e) $\frac{2}{7}$ □ $\frac{2}{9}$ The third, and most challenging, of the 3 tasks seen on slide 10 2. Put these fractions in ascending order (animals is taggest): (a) $\frac{5}{12}, \frac{1}{4}, \frac{2}{6}$ (b) $\frac{2}{9}, \frac{5}{6}, \frac{5}{9}$ (c) $\frac{2}{9}, \frac{5}{9}, \frac{3}{4}$ (d) $\frac{3}{8}, \frac{1}{9}, \frac{3}{12}$ (e) $\frac{5}{12}, \frac{1}{9}, \frac{2}{9}, \frac{5}{10}$ with self-evaluation section seen on slide 11. 3. Put these fractions in descending order (higgest to smallest): (a) $\frac{4}{7}$, $\frac{1}{5}$, $\frac{1}{5}$, (b) $\frac{2}{5}$, $\frac{5}{13}$, $\frac{3}{19}$, (c) $\frac{5}{6}$, $\frac{3}{5}$, $\frac{7}{19}$, (d) $\frac{3}{5}$, $\frac{2}{4}$, $\frac{5}{7}$, (e) $\frac{3}{4}$, $\frac{11}{12}$, $\frac{7}{6}$, $\frac{5}{6}$ Page 5 Student copy of the extension task seen on slide 12. Use the clues to put the fractions in the correct places than $\frac{1}{2}$ but less than $\frac{2}{2}$. A B C Under the smallest fraction is a number greater than $\frac{1}{4}$ but less than $\frac{2}{2}$. Night of the largest is a number greater than $\frac{1}{2}$ but D E FAbove $\frac{1}{2}$ is the second large number. less than $\frac{1}{2}$. Top right is a number less than $\frac{2}{4}$ but greater than $\frac{2}{5}$. G in the lessest fraction. at fraction. $\frac{1}{2}$ $\frac{1}{3}$ $\frac{2}{3}$ $\frac{1}{4}$ $\frac{3}{4}$ $\frac{1}{5}$ $\frac{2}{5}$ $\frac{3}{5}$ $\frac{4}{5}$ $\frac{2}{5}$ is under $\frac{2}{5}$. Page 6 & 7 Student copy of the homework task seen on slide 14. † 🗆 ; The same homework task appears on 2 separate pages to allow 10 4 2 for more choice when printing (e.g. 2 pages to a sheet). $(a)\frac{11}{12},\frac{2}{8},\frac{3}{4},\frac{5}{6} \quad (b)\frac{7}{12},\frac{2}{8},\frac{5}{4},\frac{9}{4}$ Page 8 $$\begin{split} &L(0) < \langle 0 \rangle > |0 \rangle < \langle 0 \rangle < \langle 0 \rangle < \\ &L(0) < \left(\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} \cdot 0 \right) = \left(\frac{1}{2} \cdot \frac{1}{2} \cdot$$ $$\begin{split} & 100 > 01 > 02 < 01 > 00 > \\ & 100 & \frac{1}{4} \frac{1}{4} \frac{1}{16} \cdot 01 + \frac{1}{2} \frac{1}{16} \cdot 02 + \frac{1}{2} \frac{1}{16} \cdot 02 \\ & 100 & \frac{1}{4} \frac{1}{16} \frac{1}{16} \cdot 02 + \frac{1}{2} \frac{1}{16} \cdot 02 + \frac{1}{2} \frac{1}{16} \cdot 02 \\ & 100 & \frac{1}{16} \frac{1}{16} \frac{1}{16} \cdot 02 + \frac{1}{16} \frac{1}{16} \cdot 02 + \frac{1}{16} \cdot 02 + \frac{1}{16} \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 + \frac{1}{16} \cdot 02 \cdot 02 \\ & 100 & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1}{2} \frac{1}{16} \cdot 02 \cdot 02 \cdot 02 \cdot 02 \cdot 02 \\ & \frac{1$$ This final page contains the solutions to pages 2-7 of the worksheet. In the lesson these solutions appear on the slides immediately following each task (slides 7, 9, 11, 13, 15).