# Resource in focus – Mathematics Stage 4

## Peer-assessment

This resource showcases an excerpt from the Mathematics Stage 4 sample [Unit 4 – additive thinking – Lesson 7 – seeing double](https://education.nsw.gov.au/teaching-and-learning/curriculum/mathematics/planning-programming-and-assessing-mathematics-7-10/mathematics-7-10-units#:~:text=DOCX%20415%20KB)-,Stage%204,-These%20units%20and). Sample units are optional resources that present ‘one way’ of designing teaching and learning experiences. They can be adopted and adapted for your school context.

The example below demonstrates **one way** that activities in a lesson may be adapted to strengthen opportunities for peer-assessment. It focuses on Lesson 7 – seeing double. This lesson sits within a 12-lesson unit.

**Note**: possible adaptations are represented in **bold red.**

### Launch: Lesson 7 – seeing double

**Note:** warm up section omitted.

The table below contains the suggested learning intentions and success criteria for the lesson.

|  |  |
| --- | --- |
| Learning intention | Success criteria |
| * To be able to add and subtract fractions when one denominator is a multiple of another.
 | * I can identify fractions where one denominator is a multiple of another
* I can add and subtract fractions where one denominator is a multiple of another
* I can use visual representations to aid in addition of fractions
 |

1. Assign visibly random groups of 3 ([bit.ly/visiblegroups](https://powerfullearning.com/visible-random-groups-why-this-is-the-next-thing-you-need-to-do-for-group-work-in-your-classroom/)) and have students stand at vertical non-permanent surfaces (VNPS) ([bit.ly/VNPSstrategy](https://saskmath.ca/vertical-non-permanent-surfaces-and-mini-white-boards/)).
2. Each group draws a number line on their VNPS and labels 0 to 1 (see Figure 1).

Figure 1:number line from 0 to 1



1. Read out, or write on the board, the following list of fractions that students are to mark and label on the number line.
* $\frac{1}{2}$
* $\frac{1}{4}$
* $\frac{1}{8}$
* $\frac{1}{3}$
* $\frac{1}{6}$
* $\frac{3}{4}$
* $\frac{3}{11}$
1. **Explain that groups will provide feedback to other groups using the ‘Two stars and a wish’ scaffold (**[bit.ly/peerfeedback](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/549)**). Model the use of ‘Two stars and a wish’. Use the ‘think aloud’ strategy to make thought processes visible. If necessary, revisit class norms for providing feedback to peers.**
2. Students perform a gallery walk ([bit.ly/DLSgallerywalk](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/555#.XyH_HIJCYt4.link)) to see how other groups marked the fractions on their number lines. **Groups provide feedback using the ‘Two stars and a wish’ scaffold. Provide time for groups to review and apply feedback.**
3. Pose the following questions to students, using a questioning technique such as Pose-Pause-Pounce-Bounce question strategy (PDF 557 KB) ([bit.ly/pausepouncebounce](https://bit.ly/posepausepouncebounce)):
* Which fractions were the easiest to mark?
* Why were some fractions easier to mark?
* Which fractions were more difficult to mark?
* Why were some fractions more difficult to mark?

**Note**: the point of this launch is for students to recognise that fractions with denominators that share a common factor are related. Knowing this fact makes marking the fractions on a number line easier. For example, by first marking $\frac{1}{2}$, students can then divide the length from 0 to $\frac{1}{2}$ to mark $\frac{1}{4}$.

[Lesson continues as is ...]

## References

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