Equivalent Fractions: Class 6 Lesson Plan

Practice

Lesson Plan | Grade 6 | Mathematics

Teachers Lab classroom material

Mathematics | Class 6 | 40 minutes | One outcome: explain and represent equivalent fractions.

Different partitions, the same quantity

Outcomes

- Represent 1/2 as 2/4 and 4/8 using equal-length paper strips.
- Explain why equivalent fractions name the same quantity when the whole stays the same.
- Place equivalent fractions at the same position on a 0-to-1 number line.

Teaching sequence

Recall the whole (5 minutes)

Show two identical strips. Pupils identify the whole and predict what happens if one strip is folded into more equal parts.

Compare paper strips (10 minutes)

Pairs fold identical strips into halves, quarters and eighths. Shade 1/2, 2/4 and 4/8. Align the strips at the same starting point and compare shaded lengths.

Explain equivalence (8 minutes)

Collect explanations. Relate splitting every part into two equal pieces to multiplying numerator and denominator by the same number. Keep the original whole fixed.

Practise and discuss (10 minutes)

Pupils show 1/3 = 2/6 on identical strips, place 3/4 and 6/8 on a number line, and explain why 1/2 and 2/3 are not equivalent.

Independent exit check (7 minutes)

Each pupil gives two equivalents of 2/3 and explains why. Include a comparison of half a small strip with half a larger strip to distinguish fraction labels from quantities.

What to check

Look for an explanation about equal wholes, equal positions or equal shaded lengths. A correct multiplication without an explanation may need a follow-up example.

Materials: equal-length paper strips, pencils, a ruler and a drawn number line.

Hindi teaching note: पूरा समान होना चाहिए। 1/2, 2/4 और 4/8 एक ही मात्रा दिखाते हैं। भाग छोटे होते जाते हैं, पर रंगा हुआ हिस्सा उतना ही रहता है।

Exit answers: 2/3 = 4/6 = 6/9. Multiplying numerator and denominator by the same non-zero whole number keeps the value unchanged. Half of differently sized wholes can represent different amounts.

Next lesson: compare unlike fractions using a common whole. Do not add fraction addition and subtraction to this introductory period simply to fill the plan.

Reusable lesson plan template

Class / subject: _____

Source pages and date: _____

Learning outcome: _____

Prior knowledge to check: _____

Stage	Minutes	Activity and evidence
Opening	___	_____
Exploration	___	_____
Explanation	___	_____
Practice	___	_____
Exit check	___	_____

Next lesson after reviewing responses: _____