

Relay Game

Description/Objective: Math relay is a fast-paced game that can be used to practice any math skill with the entire class.

no	1	2	3	yes	CRITERIA
0				4	1. reinforces MFM objectives
				✓	2. reinforces sixth grade curricular objectives
		✓		✓	3. easy to create, make, or put together
			✓		4. uses few game pieces
				✓	5. can be changed easily to support other objectives
				✓	6. inexpensive to create
		✓			7. can be played in a 15-20 minute time frame
	✓			✓	8. easy to understand directions
				✓	9. can be played in small groups of 2-4 players
			✓		10. students will want to play more than once

Materials needed:

1. relay cards 1-25
2. answer sheets for teams
3. relay game board (see diagram to right)

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

Game preparations:

1. Cut apart the Relay cards. (1 set each team).
2. Put cards in relay game pockets.
3. Each team needs an answer sheet.
4. Divide the class into teams of four and each team needs to choose a "runner" (or better yet a walker). This student is responsible for writing the answer in the correct box and deliver the answer to the teacher for checking.

Play of game:

1. Each team should be given the first relay card face down.
2. When the teacher says begin the first card is turned over and each team answers the card on the answer sheet.
3. Once a team has a correct answer, the 'runner' takes the answer sheet to the teacher (or checker).

4. The teacher checks the answer:

If the answer is right:

**the student puts question 1 in the correct pocket and gets card #2 and takes it back to his team to solve. GO TO STEP #3

5. Play continues until 1 team has completed all 25 cards

If the answer is wrong:

**The team gets a 10 second penalty (the runner counts to 10) and returns to his team to correct. GO TO STEP #3

Other extensions:

1. The penalty time can change.
2. Penalties can be given to runners that actually run or overly loud teams.
3. Bonus questions can be made for after question 25 to add .
4. Relay could be played with smaller teams or groups to reinforce different concepts at one time.

1

Find the product:

$$(-12)(0.5)(-3)^2$$

2

Simplify the expression:

$$(-3)(z)^3(-z)^2$$

3

Simplify the expression:

$$(-x^3)(4x - 5)$$

4

Simplify the expression:

$$(6y^2 - 5y)(2y)$$

5

Simplify:

$$3b^2(4b + 2b^2) - 2b^3$$

6

Simplify:

$$-4w^4 - w(w - 5w^3) + 3w^2$$

7

Simplify:

$$20k \div \left(-\frac{5}{6}\right)$$

8

Evaluate when $x=3$; $y=2$; $z=7$

$$\frac{5x + 3z}{2y}$$

9

Simplify:

$$(x^4 y^2 z)^2 (-xy^3 z^2)^3$$

10

Simplify:

$$(7w^2)^5 (w^4)^2$$

11

Evaluate when $x=3$ and $y=-2$:

$$(x^2 y^3)^2$$

12

Simplify:

$$x^5 \cdot x^3 \cdot x^2 \cdot x$$

13

Simplify:

$$(-3f^9)^3$$

14

Evaluate. Write your answer in simplest form:

$$3^{10} \cdot 3^{-7}$$

15

Evaluate. Write your answer in simplest form:

$$(4^3)^{-2}$$

16

Rewrite the expression w/ positive exponents:

$$-3w^{-2} x^3 y^{-4}$$

17

Rewrite the expression w/ positive exponents:

$$(-5x^3y)^{-2} \cdot (4x^6y)$$

18

Simplify:

$$\left(\frac{2b^3}{3b^4}\right)^{-3}$$

19

Simplify:

$$\frac{8^2 \cdot 8^4}{8^3}$$

20

Simplify:

$$\left(\frac{-a^3b^{-2}}{a^{-4}b^3}\right)^{-4}$$

21

Solve:

$$x^2 + 9 = 25$$

22

Solve:

$$4x^2 - 13 = 19$$

23

Simplify:

$$\sqrt{45}$$

24

Simplify:

$$\frac{3\sqrt{18}}{\sqrt{81}}$$

25

Simplify:

$$(-2x^2 - 7x + 3) - (-5x^2 + 3x - 7)$$