**Task card 1** Mixture & Work Word Problems

How many liters of an 85% acid solution must be mixed with 1 liter of a 70% acid solution to make an 80% acid solution?

**Task card 2** Mixture & Work Word Problems

Priya can shelve a cart of library books in 28 minutes. Sam can do the same job in 21 minutes. How many minutes does the job take if they work together?

**Task card 3** Mixture & Work Word Problems

A store mixes granola costing $16 per pound with 3 pounds of oat cereal costing $8 per pound. The mixture is worth $12 per pound. How many pounds of granola are in the mixture?

**Task card 4** Mixture & Work Word Problems

Working together, Ana and Ben can sort a crate of mail in 10 minutes. Working alone, Ana needs 35 minutes. How many minutes would Ben need working alone?

**Task card 5** Mixture & Work Word Problems

How many liters of water must be added to 12 liters of a 30% salt solution to make a 20% salt solution?

**Task card 6** Mixture & Work Word Problems

A chemist needs 3 liters of a 45% acid solution and has a 30% solution and a 75% solution to mix. How many liters of the 75% solution should the chemist use?

**Task card 7** Mixture & Work Word Problems

1 pound of oat cereal costing $10 per pound is mixed with 1 pound of granola costing $16 per pound. What is the cost per pound of the mixture?

**Task card 8** Mixture & Work Word Problems

Working together, Omar and Lily can wipe down the lab tables in 8 minutes. Working alone, Omar needs 10 minutes. How many minutes would Lily need working alone?

**Task card 9** Mixture & Work Word Problems

How many liters of a 20% salt solution must be mixed with 14 liters of a 65% salt solution to make a 55% salt solution?

**Task card 10** Mixture & Work Word Problems

Ivan can shelve a cart of library books in 20 minutes. Zoe can do the same job in 30 minutes. How many minutes does the job take if they work together?

**Task card 11** Mixture & Work Word Problems

A store mixes granola costing $12 per pound with 3 pounds of oat cereal costing $10 per pound. The mixture is worth $11 per pound. How many pounds of granola are in the mixture?

**Task card 12** Mixture & Work Word Problems

Working together, Nora and Jack can sort a crate of mail in 10 minutes. Working alone, Nora needs 30 minutes. How many minutes would Jack need working alone?

**Task card 13** Mixture & Work Word Problems

How many liters of water must be added to 22 liters of a 20% salt solution to make a 10% salt solution?

**Task card 14** Mixture & Work Word Problems

A chemist needs 11 liters of a 50% sugar solution and has a 25% solution and an 80% solution to mix. How many liters of the 80% solution should the chemist use?

**Task card 15** Mixture & Work Word Problems

12 pounds of black tea costing $9 per pound are mixed with 3 pounds of jasmine tea costing $14 per pound. What is the cost per pound of the mixture?

**Task card 16** Mixture & Work Word Problems

Working together, Ivan and Zoe can stack a pallet of boxes in 6 minutes. Working alone, Ivan needs 7 minutes. How many minutes would Zoe need working alone?

**Task card 17** Mixture & Work Word Problems

A chemist needs 32 liters of a 70% alcohol solution and has a 35% solution and a 75% solution to mix. How many liters of the 35% solution should the chemist use?

**Task card 18** Mixture & Work Word Problems

Nora can sort a crate of mail in 24 minutes and Jack can do it in 40 minutes. Nora works alone for 16 minutes, and then Jack joins in. How many more minutes does it take them to finish the job together?

**Task card 19** Mixture & Work Word Problems

A store wants 16 pounds of a mixture worth $14 per pound, made from oat cereal costing $2 per pound and granola costing $18 per pound. How many pounds of oat cereal are needed?

**Task card 20** Mixture & Work Word Problems

A pipe can fill an empty tank in 15 hours. A drain can empty the full tank in 20 hours. If the pipe is turned on while the drain is open, how many hours does it take to fill the empty tank?

**Task card 21** Mixture & Work Word Problems

How many liters of pure alcohol must be added to 32 liters of a 15% alcohol solution to make a 20% alcohol solution?

**Task card 22** Mixture & Work Word Problems

Nora can wash the windows of a school in 2 hours. Jack can do the same job in 4 hours. How many hours does the job take if they work together? Write a mixed number.

**Task card 23** Mixture & Work Word Problems

How many liters of water must be added to 36 liters of a 35% salt solution to make a 15% salt solution?

**Task card 24** Mixture & Work Word Problems

Working together, Omar and Lily can stack a pallet of boxes in 6 minutes. Working alone, Omar needs 9 minutes. How many minutes would Lily need working alone?

# Mixture & Work Word Problems Task Cards

Recording sheet · Grade 9 · Solve each problem. Write just the number; if an answer is not a whole number, write it as a fraction or mixed number like 2 2/5.

Name: _____ Date: _____

Scan to check your answers

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

# Mixture & Work Word Problems Task Cards: Answer Key

Grade 9 · Medium

The answers online

| | | |
|---|---|---|
| **1.** 2 | **2.** 12 | **3.** 3 |
| **4.** 14 | **5.** 6 | **6.** 1 |
| **7.** $13 | **8.** 40 | **9.** 4 |
| **10.** 12 | **11.** 3 | **12.** 15 |
| **13.** 22 | **14.** 5 | **15.** $10 |
| **16.** 42 | **17.** 4 | **18.** 5 |
| **19.** 4 | **20.** 60 | **21.** 2 |
| **22.** $1\frac{1}{3}$ | **23.** 48 | **24.** 18 |