

Outcome 4 - Highest Common Factor

Bronze example

Examples... **The Highest Common Factor is the BIGGEST number that appears in both lists!**

What is the Highest Common Factor of 10 and 18?

Factors of 10...
1, 2, 5, 10 H.C.F. = 2

Factors of 18...
1, 2, 3, 6, 9, 18

Silver example

Examples... **The Highest Common Factor is the BIGGEST number that appears in both lists!**

What is the Highest Common Factor of 32 and 64?

Factors of 32...
1, 2, 4, 8, 16, 32 H.C.F. = 32

Factors of 64...
1, 2, 4, 8, 16, 32, 64

Gold example

Examples... **The Highest Common Factor is the BIGGEST number that appears in both lists!**

What is the Highest Common Factor of 245 and 275?

Factors of 245... H.C.F. = 5
1, 5, 7, 35, 49, 245

Factors of 275...
1, 5, 11, 25, 55, 275

Bronze Questions

Write down the Highest Common Factor (H.C.F.) of...

- | | |
|-------------|--------------|
| 1 9 and 18 | 2 6 and 12 |
| 3 4 and 14 | 4 15 and 10 |
| 5 10 and 16 | 6 18 and 24 |
| 7 12 and 20 | 8 10 and 20 |
| 9 8 and 24 | 10 15 and 24 |

Silver Questions

Write down the Highest Common Factor (H.C.F.) of...

- | | |
|--------------|----------------|
| 1 25 and 65 | 2 32 and 56 |
| 3 30 and 36 | 4 27 and 36 |
| 5 60 and 72 | 6 42 and 63 |
| 7 48 and 64 | 8 108 and 144 |
| 9 84 and 120 | 10 120 and 140 |

Gold Questions

Write down the Highest Common Factor (H.C.F.) of...

- | | |
|---------------|----------------|
| 1 150 and 250 | 2 270 and 345 |
| 3 280 and 300 | 4 360 and 420 |
| 5 360 and 425 | 6 375 and 625 |
| 7 510 and 680 | 8 800 and 820 |
| 9 845 and 850 | 10 975 and 980 |

Bronze Answers

- | | | | |
|----|---|-----|----|
| 1. | 9 | 2. | 6 |
| 3. | 2 | 4. | 5 |
| 5. | 2 | 6. | 6 |
| 7. | 4 | 8. | 10 |
| 9. | 8 | 10. | 3 |

Silver Answers

- | | | | |
|----|----|-----|----|
| 1. | 5 | 2. | 8 |
| 3. | 6 | 4. | 9 |
| 5. | 12 | 6. | 21 |
| 7. | 16 | 8. | 36 |
| 9. | 12 | 10. | 20 |

Gold Answers

- | | | | |
|----|-----|-----|-----|
| 1. | 50 | 2. | 15 |
| 3. | 20 | 4. | 60 |
| 5. | 5 | 6. | 125 |
| 7. | 170 | 8. | 20 |
| 9. | 5 | 10. | 5 |