

Factor a Greatest Common Factor (GCF) Scavenger Hunt Game

Monomial

Factor the GCF.

$$10x^3 - 3x$$

$$2x^2y(1 + 2x^2 + 3x^4)$$

Factoring a Greatest Common Factor (GCF) Scavenger Hunt Game

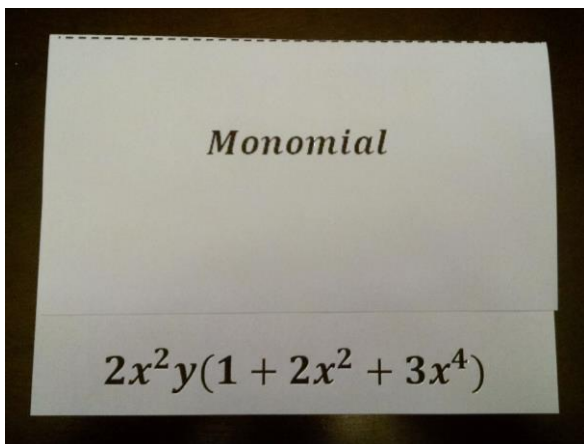
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Materials Included

- Directions
- Teacher's Key
- Student Worksheet
- Scavenger Hunt Problems

Teacher Preparation

1. Print teacher's key and student worksheet (pages 4 - 6).
2. Make copies of the student worksheet for every student in your class.
3. Print the scavenger hunt problems (pages 7-38). **The scavenger hunt problems must be printed double-sided (page 7 is printed on the back of page 8, etc.).** You may have to manually print on both sides or you may have to use a duplex setting on the printer.
4. Fold the scavenger hunt problems on the dotted line.

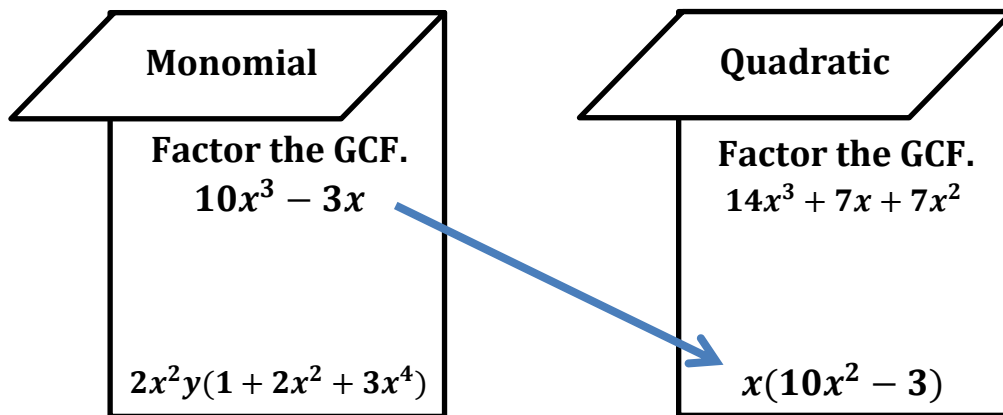


5. Tape the scavenger hunt problems around the classroom making sure that students are able to reach them.

Getting Students Started

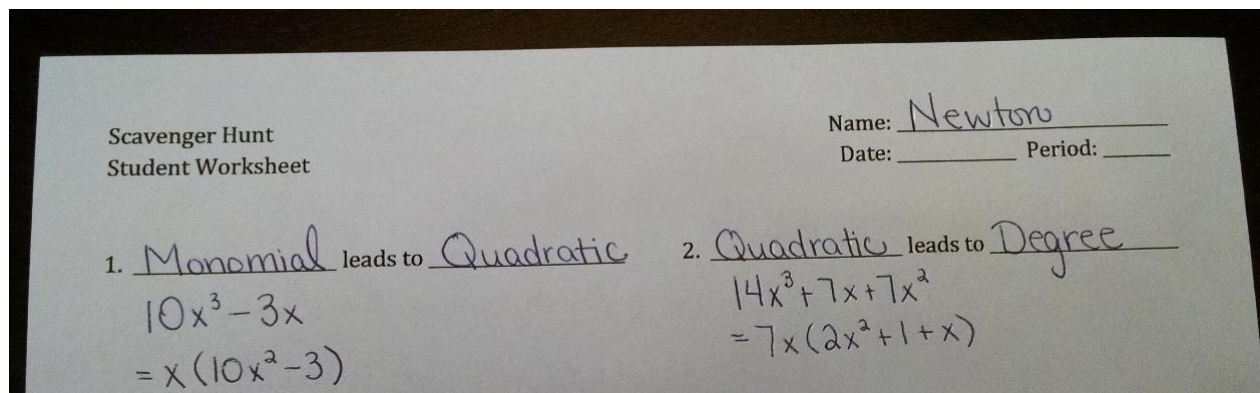
1. Pass out the student worksheets.
2. The first few times I do a scavenger hunt with a class I work through one scavenger hunt problem with the class. If possible, project the student worksheet on the SMART Board or document camera.
3. Students will start at a scavenger hunt problem by writing down the vocabulary word on the outside flap.
4. Students will then open the flap and write down the problem on the inside.
5. Students will find the answer to the problem on their worksheet.

6. Students will then search for the answer on the bottom of another scavenger hunt problem around the classroom. Students will write down the vocabulary word once they've found it and repeat the process.



7. Students will know that they are finished when they loop back around to the scavenger hunt problem they started with.

Example Student Worksheet:



I hope that you and your students enjoy the scavenger hunt game. If you ever have any questions, please let me know. I am always looking for ways to improve so please leave your feedback and rating. Thank you!

Scavenger Hunt Teacher Key

Monomial leads to Quadratic

Quadratic leads to Degree

Degree leads to Polynomial

Polynomial leads to GCF

GCF leads to Binomial

Binomial leads to Cubic

Cubic leads to Linear

Linear leads to Trinomial

Trinomial leads to Coefficient

Coefficient leads to Constant

Constant leads to Quartic

Quartic leads to Standard Form

Standard Form leads to Factor

Factor leads to Term

Term leads to Quintic

Quintic leads to Monomial (go to top of page)

Students will be starting in different places for the scavenger hunt. To use this key, you must find where the student started and go from there.

Scavenger Hunt
Student Worksheet

Name: _____

Date: _____ Period: _____

1. _____ leads to _____

2. _____ leads to _____

3. _____ leads to _____

4. _____ leads to _____

5. _____ leads to _____

6. _____ leads to _____

7. _____ leads to _____

8. _____ leads to _____

9. _____ leads to _____

10. _____ leads to _____

11. _____ leads to _____

12. _____ leads to _____

13. _____ leads to _____

14. _____ leads to _____

15. _____ leads to _____

16. _____ leads to _____

Monial



Factor the GCF.

$$10x^3 - 3x$$

$$2x^2y(1 + 2x^2 + 3x^4)$$

Quadratic

Factor the GCF.
 $14x^3 + 7x + 7x^2$

$$**$x(10x^2 - 3)$**$$

Degree



Factor the GCF.

$$36x + 18x^2 + 3$$

$$7x(2x^2 + 1 + x)$$

Polynomial

Factor the GCF.

$$-15x^2 + 7x$$

$$3(12x + 6x^2 + 1)$$

GCF



Factor the GCF.

$$9x^2 + x$$

$$x(-15x + 7)$$

Binomial

Factor the GCF.

$$4x^3 + 6x^2 + 10x$$

$$x(9x + 1)$$

Cubic



Factor the GCF.

$$3x^2y - 3x^2y^6$$

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

Linear



Factor the GCF.

$$3x^2y - 9xy^4$$

$$3x^2y(1 - y^5)$$

Trinomial



Factor the GCF.

$$40x^3 + 5x^2 + 15x$$

$$3xy(x - 3y^3)$$

coefficient

Factor the GCF.

$$14x^3y^2 - 21x^2y^3$$

$$5x(8x^2 + x + 3)$$

Constant



Factor the GCF.

$$9y + 5y^2$$

$$7x^2y^2(2x - 3y)$$

Quartic

Factor the GCF.

$$2x^2 - 4x + 8y$$

$$y(9 + 5y)$$

*Standard
Form*

Factor the GCF.

$$x^3 + xy + 5x^2$$

$$x^2(x + y + 5)$$

Factor

Factor the GCF.

$$5x^2 - 5x$$

$$x(x^2 + y + 5x)$$

Term



Factor the GCF.

$$16x^3 - 12x + 6$$

$$5x(x - 1)$$

Quintic

Factor the GCF.

$$2x^2y + 4x^4y + 6x^6y$$

$$2(8x^3 - 6x + 3)$$