

Basics of Gears (Space Challenge)

Names: _____

1. Before running your program, predict what will happen when it starts. Which way will the gears turn? (Have Mr. Gunkelman sign off on this BEFORE you do it>)

2. Which way did the gears turn?

3. Is this a 1:1 gearing? Does it gear up or gear down?

4. What is the gear ratio?

2nd time

5. Before running your program, predict what will happen when it starts. Which way will the gears turn? (Have Mr. Gunkelman sign off on this BEFORE you do it>)

6. Which way did the gears turn?

7. Is this a 1:1 gearing? Does it gear up or gear down?

8. What is the gear ratio?

Basics of Gears (Space Challenge)

3rd time

9. Before running your program, predict what will happen when it starts. Which way will the gears turn? (Have Mr. Gunkelman sign off on this BEFORE you do it>)

10. Which way did the gears turn?

11. Is this a 1:1 gearing? Does it gear up or gear down?

12. What is the gear ratio?

4th time

13. Before running your program, predict what will happen when it starts. Which way will the gears turn? (Have Mr. Gunkelman sign off on this BEFORE you do it.)

14. What effect do you think the middle gear will have in terms of direction and speed? (Have Mr. Gunkelman sign off on this BEFORE you do it.)

15. Which way did the gears turn?

16. Is this a 1:1 gearing? Does it gear up or gear down?

17. What is the gear ratio?

18. This is what I learned about gears, gear ratios, turning direction, and speed.