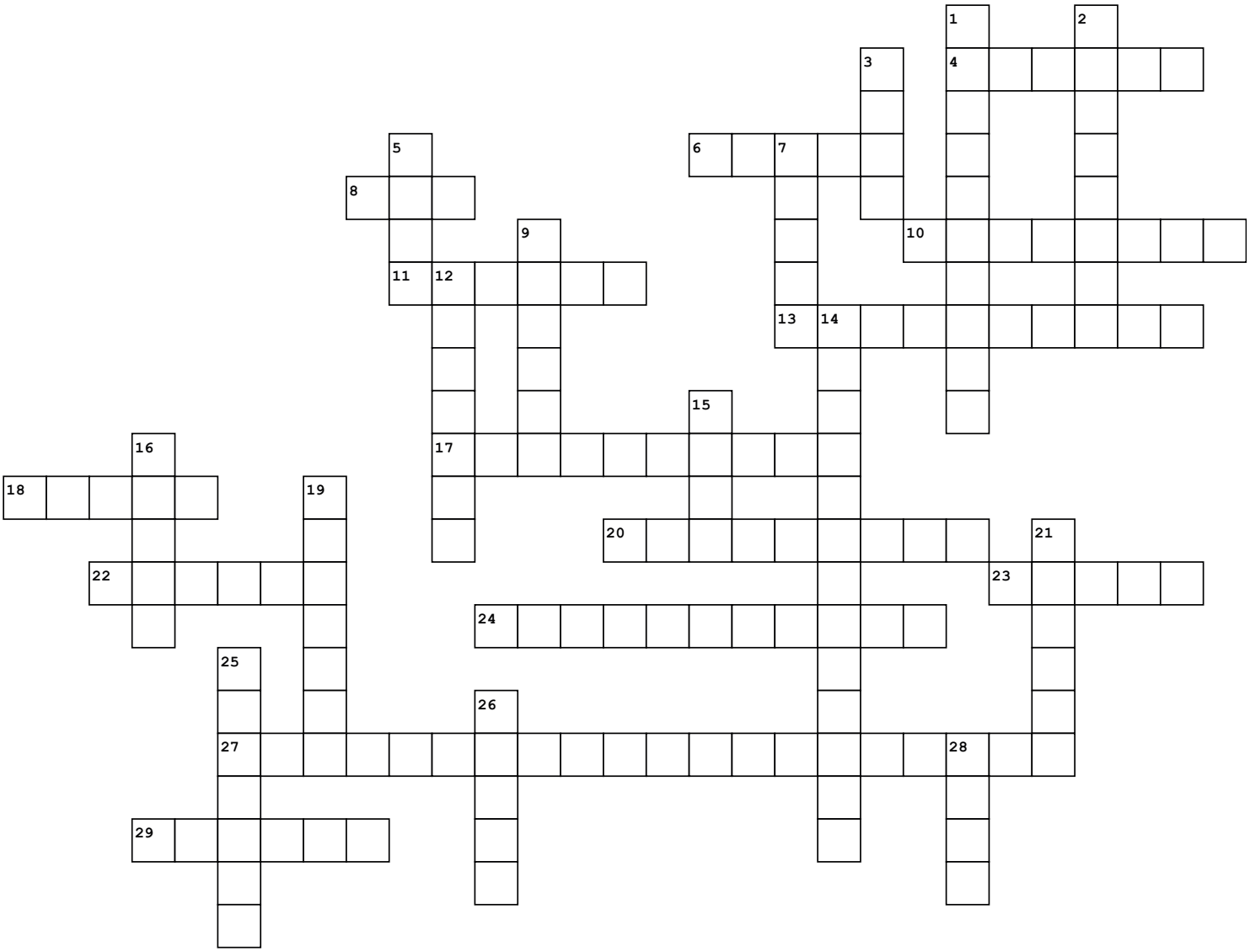
Work, Energy, Power and Simple Machines Review



Across

4. THE ABILITY TO DO WORK

6. MEASURES THE RATE AT WHICH WORK IS DONE IN A CERTAIN PERIOD OF TIME.

8. A WHEEL HAS A RADIUS OF 12 INCHES. THE AXLE HAS A RADIUS OF 2 INCHES. WHAT IS THE MA?

10. _____ PLANE-SIMPLE MACHINE THAT IS A SLOPED SURFACE, OR RAMP.

11. _____ FORCE-FORCE APPLIED TO A MACHINE.

13. ABILITY OF A MACHINE TO CONVERT WORK INPUT INTO WORK OUTPUT.

Down

1. _____ ADVANTAGE-COMPARISON OF THE INPUT FORCE TO THE OUTPUT FORCE OF A MACHINE.

2. A FORCE PRESENT IN ALL MOVING OBJECTS; OPPOSES MOTION.

3. OCCURS WHEN A FORCE IS APPLIED OVER A DISTANCE.

5. A PULLEY SYSTEM ALLOWS SOMEONE TO LIFT A 100 NEWTON BOX UP 5 METERS WITH 20 NEWTONS OF FORCE. WHAT IS THE MA?

7. MOVING INCLINED PLANE WITH ONE OR TWO SLOPING SIDES.

17. _____FORCE-THE FORCE THAT A MACHINE MUST OVERCOME.

18. INCLINED PLANE WRAPPED AROUND A SHAFT.

20. STORED ENERGY

22. THE UNIT OF FORCE

23. TWO NEWTONS APPLIED OVER 4 METERS.

24. YOU ARE ABLE TO LIFT A 50 NEWTON BOX 3 METERS ONTO A TRUCK USING A RAMP. THE RAMP ALLOWS YOU TO PUSH THE BOX AT 20 NEWTONS, OVER 8 METERS. WHAT IS THE PERCENT EFFICIENCY OF THE RAMP?

27. FORCE OUTPUT DIVIDED BY FORCE INPUT.

29. A SURFACE, SUCH AS A WHEEL, THAT REDIRECTS FORCE USING A ROPE.

9. THE UNIT OF WORK

12. THE POINT ABOUT WHICH A LEVER PIVOTS.

14. YOU RIDE YOUR BIKE 1000 METERS TO TOWN. YOU USE 5 NEWTONS OF FORCE FOR EACH METER. HOW MUCH WORK DID YOU DO?

15. THE UNIT OF THE RATE AT WHICH WORK IS DONE.

16. MADE FROM A ROD OR PLANK THAT PIVOTS ABOUT A POINT.

19. THE ENERGY OF MOTION

21. _____ MACHINE-WORKS WITH ONLY ONE MOTION, SUCH AS AN INCLINED PLANE, LEVER, ETC.

25. _____ MACHINE-COMBINATION OF TWO OR MORE MACHINES.

26. A PULLEY SYSTEM LIFTS A 10 NEWTON BOX 5 METERS. HOW MANY JOULES OF WORK ARE DONE?

28. WHEEL AND ____-SIMPLE MACHINE MADE FROM TWO RIGIDLY ATTACHED WHEELS THAT ROTATE TOGETHER.