## SYSTEMS AND CONTROL INCLUDING GEARS

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On behalf of The World Association of Technology Teachers

W.A.T.T.



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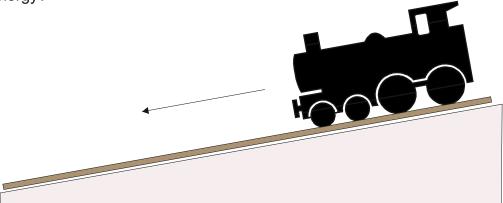
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1. Diesel trains are used throughout the country. They use diesel as a fuel for engines which drive the train forwards at high speed, creating movement. Complete the systems diagram below to show the main energy changes.



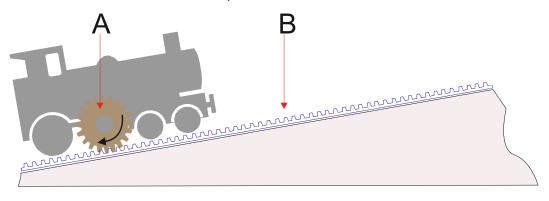
2. What is Kinetic Energy?

3. The train seen below is at the top of an incline. At any point it could roll downwards, gathering speed. What is potential energy?



Potential energy is: \_

4. The train at the bottom of the steep incline has a special gear system. On the diagram the gear system is marked A and B. What are the correct names for parts A and B?



PART A:

PART B: