

STANDARD: HS.P.E.41 \_\_\_\_\_ HS.P.E.42 \_\_\_\_\_ HS.P.E.43 \_\_\_\_\_

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

## HS.P.E.41, 42, 43 Assessment

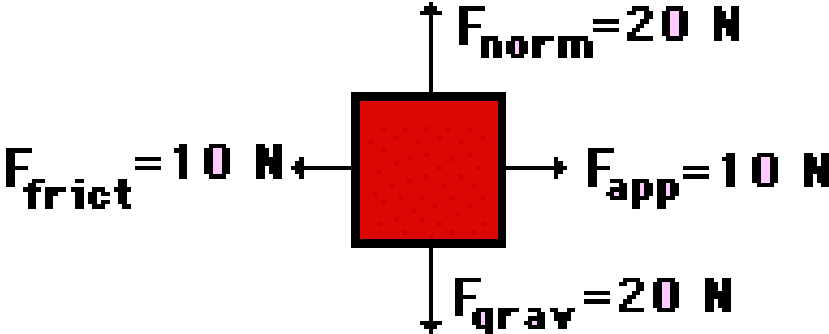
HS.P.E.41	I can use the relationship between the force applied to an object and the displacement of the object to calculate the work done on that object	
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1. How many joules of work are done on a box when a force of 25 N pushes it 3 meters?

What you know (Variables)	
Formula	
Substitute (Variables in Formula)	
Calculations	
Answer	

HS.P.E.42	I can calculate the work done when the force and the displacement are not in the same direction.	
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A 10 N force is applied to push a block across a frictional surface at constant speed for a displacement of 15 meters to the right.

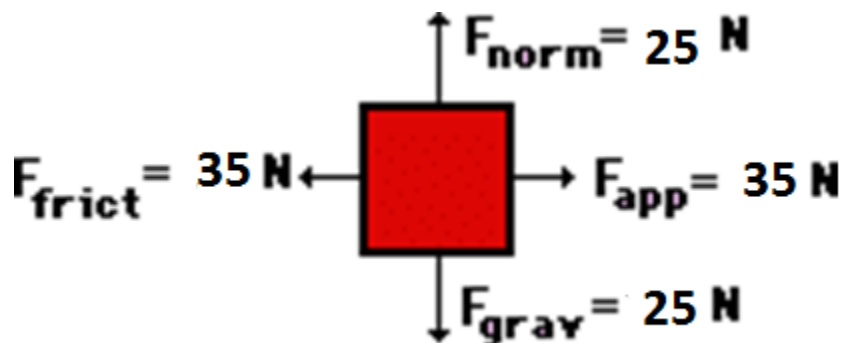


2. From the picture above, what is the work done by the frictional force.

What you know (Variables)	
Formula	
Substitute (Variables in Formula)	
Calculations	
Answer	

HS.P.E.43	I can calculate the work done by a particular force as well as the net work done to an object or system.	
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A 35 N force is applied to push a block across a frictional surface at constant speed for a displacement of 12 meters to the right.



3. Circle which forces are doing work. If they are doing work how much (calculate the work)?

$F_{\text{frict}}$	$F_{\text{norm}}$
$F_{\text{grav}}$	$F_{\text{app}}$