TE 2. Unit 10.1. **Surname Name Group**

Task 1. Write definitions to property words by completing a crossword.

compressive strength elasticity flexibility plasticity rigidity tensile strength torsional strength toughness

Across:
2. Ability to resist twisting forces
4. Ability to return to original shape after deformation
5. Inability to bend; stiffness
7. Ability to resist being pulled apart

Down:

1. Ability to absorb impact without breaking
2. Ability to bend without breaking
3. Ability to resist squeezing forces
4. Ability to be permanently deformed without breaking

Task 2: Fill in the gaps with the appropriate words.

toughness tensile strength rigidity flexibility elasticity compressive strength plasticity torsional strength

1. A rubber band returns to its original length after stretching because of its _____.
2. The _____ of the metal beam prevents it from bending under heavy loads.
3. Concrete is ideal for foundations because of its high _____.
4. The bridge collapsed because the steel lacked _____ and snapped under the wind.
5. A paperclip can be bent into different shapes due to its _____.
6. The car bumper absorbed the impact without cracking because of its _____.
7. The drive shaft must have high _____ to resist twisting forces from the engine.
8. Glass has low _____ and shatters easily when dropped.

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Task 3. Complete each sentence by choosing the correct word form from the brackets.

1. The _____ (elastic / elasticity) of the rubber band decreased after being left in the sun.
2. The bridge collapsed because the steel lacked _____(tensile / tension) strength.
3. The _____(rigid / rigidity) of the metal beam prevents it from bending under heavy loads.
4. The rubber hose has excellent _____(flexible / flexibility), allowing it to bend around corners.
5. Concrete has excellent _____ (compressive / compression) strength, making it ideal for foundations.
6. Clay is highly _____(plastic / plasticity), which makes it easy to shape into pots.
7. The drive shaft must resist _____(torsion / torsional)_ forces from the engine.

Task 4. Connect each failure to the missing property.

Failure	Missing property
1. A steel cable snapped under a heavy load	a) heat resistance
2. A metal beam bent permanently under heavy weight	b) flexibility
3. A rubber tyre melted on a hot road	c) rigidity
4. A glass dropped on the floor shattered	d) plasticity
5. Metal pipe broke when bent sharply	e) tensile strength
6. A metal rod snapped instead of bending permanently under pressure	f) toughness

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Task 5. Listen to the audio "The Problem with Concrete" and decide if the statements are TRUE or FALSE.

True or False?

Statement	True or False?
1. Concrete has high tensile strength.	
2. Concrete is used for foundations because of its compressive strength.	
3. Concrete cracks easily when bent.	
4. Reinforced concrete contains steel.	
5. Steel protects concrete from fire.	

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