



Al-Mustaqbal University
Department of Construction and
building Engineering Technology

Class one - first semester

Subject: English language

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PART 1 – Basic Engineering Terms

المصطلحات الهندسية الأساسية

1. Force : القوة

A push or pull that can change the shape or motion of an object.

دفع أو سحب يمكن أن يغيّر شكل أو حركة الجسم.

Example:

The force of the engine moves the car.

المثال : قوة المحرك تحرك السيارة.

2. Efficiency : الكفاءة

How well a machine converts energy into useful work.

مدى فعالية الآلة أو الماكينة في تحويل الطاقة إلى عمل أو شغل مفيد.

Example:

This engine has high efficiency.

المثال: هذا المحرك يتمتع بكفاءة عالية.

3. Circuit: الدائرة الكهربائية

A complete path through which electric current flows.

مسار كامل يمر عبره التيار الكهربائي.

Example:

The circuit must be closed for the lamp to turn on.

المثال: يجب أن تكون الدائرة مغلقة لتشعل المصباح.

4. Power Supply : مزود الطاقة

A device that provides electrical energy to a system.

جهاز يزود النظام بالطاقة الكهربائية.

Example:

The power supply provides electricity to the circuit.

المثال: مزود الطاقة يوفر الكهرباء للدائرة.

5. Transformer : المحوّل الكهربائي

A device that changes voltage levels in an electrical system.

جهاز يغيّر مستويات الجهد في النظام الكهربائي.

Example:

The transformer reduces high voltage.

المثال: المحوّل يقلّل الجهد العالي.

6. Switch: المفتاح الكهربائي

A device used to open or close an electrical circuit.

جهاز يُستخدم لفتح أو غلق الدائرة الكهربائية.

Example:

Turn on the switch to start the machine.

المثال: شغل المفتاح لتشغيل الآلة أو الماكينة.

7. Friction : الاحتكاك

The resistance that occurs when two surfaces move against each other.

المقاومة التي تحدث عند حركة سطحين متلامسين.

Example:

Friction causes heat in the machine.

المثال: الاحتكاك يسبّب حرارة في الآلة أو الماكينة.

8. Insulation: العزل

Material that prevents the flow of electricity or heat.

مادة تمنع انتقال الكهرباء أو الحرارة.

Example:

Good insulation protects the wires.

المثال: العزل الجيد يحمي الأسلاك.

9. Cooling : التبريد

The process of reducing temperature in a system or machine.

عملية تقليل درجة الحرارة في نظام أو الآلة .

Example:

Cooling prevents the motor from overheating.

المثال: التبريد يمنع ارتفاع حرارة المحرك.

10. Vibration : الاهتزاز

Repeated movement back and forth in a machine.

حركة متكررة ذهابًا وإيابًا في الآلة.

Example:

Excessive vibration can damage equipment.

المثال: الاهتزاز الزائد قد يسبب تلف المعدات

11. Resistance: المقاومة الكهربائية

The opposition to the flow of electric current.

المقاومة التي تعيق تدفق التيار الكهربائي.

Example:

High resistance reduces the current.

المثال: المقاومة العالية تقلل التيار.

12. Load : الحمل

The power or force used by a machine or system.

القوة المستخدمة من قبل الماكينة أو النظام.

Example:

The motor carries a heavy load.

المثال: المحرك يتحمل حملاً ثقيلاً.

13. Heat : الحرارة

A form of energy produced by motion or electricity.

شكل من أشكال الطاقة يُنتج بالحركة أو الكهرباء.

Example:

The machine produces heat during operation.

المثال: الآلة أو الماكينة تنتج حرارة أثناء التشغيل.

14. Control : التحكم

The process of regulating or managing a system.

عملية تنظيم أو إدارة نظام معين.

Example:

The control system adjusts the motor speed.

المثال: نظام التحكم يُضبط سرعة المحرك.

Q/ Part 1: Multiple Choice

1. What is a force? ما هي القوة؟

A. type of energy. / نوع من الطاقة

B. A push or pull that can change the shape or motion of an object.
دفع أو سحب يمكن أن يغيّر شكل أو حركة الجسم /

C. A machine / ماكينة

D. A circuit / دائرة كهربائية

E. Heat / حرارة

2. Which device changes voltage levels in an electrical system?

أي جهاز يغيّر مستويات الجهد في النظام الكهربائي؟

A. Switch / مفتاح كهربائي

B. Transformer / محوّل كهربائي

C. Load / الحمل

D. Power Supply / مزود الطاقة

E. Insulation / العزل

3. What is the main purpose of insulation? ما الغرض الرئيسي من العزل؟

A. To reduce motion / لتقليل الحركة

B. To prevent the flow of electricity or heat / لمنع انتقال الكهرباء أو الحرارة

C. To increase vibration / لزيادة الاهتزاز

D. To produce energy / لإنتاج الطاقة

E. To control the load / للتحكم بالحمل

4. Which of the following best describes efficiency? أي مما يلي يصف الكفاءة بشكل أفضل؟

A. How well a machine converts energy into useful work / مدى فعالية الماكينة في تحويل الطاقة إلى شغل مفيد

B. The speed of a motor / سرعة المحرك

C. The heat produced by friction / الحرارة الناتجة عن الاحتكاك

D. A type of insulation / نوع من العزل

E. The vibration of a machine / اهتزاز الماكينة

5. Which device is used to open or close an electrical circuit?

أي جهاز يُستخدم لفتح أو غلق الدائرة الكهربائية؟

A. Transformer / محوّل كهربائي

B. Switch / مفتاح كهربائي

C. Cooling system / نظام التبريد

D. Load / الحمل

E. Resistance / المقاومة

Q/ True or False ;

6. Friction is the resistance that occurs when two surfaces move against each other. True or False

الاحتكاك هو المقاومة التي تحدث عند حركة سطحين متلامسين.

7. Cooling increases the temperature of a machine. True or False

التبريد يزيد من درجة حرارة الماكينة.

8. Resistance helps the electric current to flow more easily. True or False

المقاومة تساعد التيار الكهربائي على التدفق بسهولة أكبر.

9. Vibration is the repeated movement back and forth in a machine. True or False

الاهتزاز هو حركة متكررة ذهاباً وإياباً في الماكينة.

10. A power supply provides electricity to a circuit. True or False

مزود الطاقة يوفر الكهرباء للدائرة.

Part 2 _ Unit 4 – Family and Friends

In Unit 4, students learn how to:

- Use 's = is correctly
- Use possessive 's to show ownership

- Differentiate between possessive adjectives and possessive pronouns
- Talk about family members
- Use have / has correctly

1. Grammar Explanation 's = is (contraction).

- In English, 's is a short form of the verb is.
- This is called a **contraction**.
- It is very common **in spoken and written English**.

Examples ;

- She's married.
→ She is married.
- He's a doctor.
→ He is a doctor.
- It's a big family.
→ It is a big family.

Important Note

In this case, 's does NOT show possession. It only means is

2. Possessive 's (Showing Ownership)

We use **possessive 's** to show that something **belongs to** someone.

Form; Person + 's + noun

Examples ;

- This is Annie's family.
- Jim's office is big.
- Emma's school is near her house.

Important Note

- ☐ In all these examples, 's means "belongs to".
- ☐ It answers the question: Whose?

Q/ Look at the sentences below and say what type of 's is used, and also Choose the correct sentence ;

- 's = is → contraction
- Possessive 's → shows ownership

1-

- ☐ What's your daughter name? ✗
- ☐ What's your daughter's name? ✓

2-

- ☐ That's my sister's car. ✓
- ☐ That's my sister is car. ✗

3-

☐ What's your brother job? ✗

☐ What's your brother's job? ✓

4-

☐ She's a teacher. ✓

☐ She's teacher. ✗

5-

☐ This is Ali's family. ✓

☐ This is Ali is family. ✗

3. *Possessive Adjectives.*

Possessive adjectives show who owns something. They are always used before a noun.

Subject Pronoun	Possessive Adjective
I	my
You	your
He	his
She	her

It

its

We

our

They

their

Examples;

- ☐ This is my family.
- ☐ Her name is Emma.
- ☐ His office is on the second floor.
- ☐ Their house is very comfortable.

Important Note

- ☐ A possessive adjective must be followed by a noun. This book is my book. ✓
- ☐ You cannot use it alone. This book is my ✗

4. Possessive Pronouns.

Possessive pronouns also show ownership, but they replace the noun. They are used when the noun is already known.

Subject Pronoun	Possessive Adjective	Possessive Pronoun
I	my	mine
You	your	yours
He	his	his
She	her	hers
It	its	—
We	our	ours
They	their	theirs

Examples ;

☐ This book is mine.

☐ The bag is hers.

Important Note

- ☐ Possessive adjectives → **before a noun** → This is **my family**.
- ☐ Possessive pronouns → **no noun after them** → This book is **mine**.
- ☐ **It** has no possessive pronoun form.

5. Family Vocabulary / the Use of Have / Has.

In this unit, we use family words to practice possession.

- ☐ father
- ☐ mother
- ☐ brother
- ☐ sister
- ☐ husband
- ☐ wife
- ☐ son
- ☐ daughter
- ☐ parents

Important Note

We use **have** and **has** to talk about possession or family members.

Have/ Has Usage ; I / You / We / They → ***have***
He / She / It → ***has***

Examples

- I have two brothers.
- We have a big family.

- She has one sister.
- He has a son.

Common Mistakes:

- ✗ *She have a brother* → ✓ *She has a brother.*
- ✗ *This is her family's* → ✓ *This is her family.*
- ✗ *This bag is her* → ✓ *This bag is hers.*
- ✗ *He have a big family* → ✓ *He has a big family.*

Conclusion

By the end of this lecture, students will be able to:

- Use 's = is correctly
- Use possessive 's to show ownership
- Use possessive adjectives and possessive pronouns
- Talk about family members
- Use has / have correctly

The End

Thanks for your attention