# INFORMATION & COMMUNICATION TECHNOLOGY



## Theme 3

## **Digital Citizenship**

Lesson	1	Active Explorer
Lesson	2	Digital Citizenship
Lesson	3	Positive Effects of ICT
Lesson	4	Online Communication
Lesson	5	How to Use Electronic Communication
Lesson	6	Online Learning Environment
Lesson	7	A Plan for Digital Research
Lesson	8	Synchronous & Asynchronous Communications



**Active Explorer** 

#### William Tyner: (Anthropologist)

He is an anthropologist, technologist, and filmmaker.

Anthropologist is a scientist in human sciences and culture field.

He uses different types of <u>digital technology tools</u> in various fields of his work, to find real solutions to problems.

William Tyner works with various organizations that help people connect with other people or services that can help them.

Organizations do this by building easy-to-use digital technology tools and applications that give people the information they need.

#### **Importance of Digital Tools:**

1. Choose the correct answer:

c. successful digital citizens

a. planes

5. We can book tickets for..... using digital tools.

b. trains

- 1. Traveling became easier: Because we can book tickets for trains, buses and planes online.
- 2. Easiness of booking tickets with a button click to visit historical and cultural sites.
- 3. Providing information for everyone through the Egyptian Knowledge Bank.

1. William Tyner	is a			
a. technologist	b. filmmaker	c. cultural anthrope	ologist	d. all the previou
2. William Tyner	uses	in his work to f	find real	solutions
a. traveling	b. money	c. technology	d. no	correct answer
3. We can form go	ood relationships	and exchange opini	ons sing.	•••••
a. digital comr	nunication	b. TV and con	nputers	
c. traveling		d. no correct ar	nswer	
4. Using technolog	gy in a positive v	vay helps people bec	ome	•••••
a. good digital	citizens	b. genius citize	ens	

d. no correct answer

c. buses

d. all the previous

#### 2. Complete:

(Digital communication - digital citizens - digital technology - EBK) 1. William Tyner uses..... for problems. in his work to find real solutions 2. Using technology in a positive way helps people become successful...... 3. .....is very important for exchanging opinions. 4.....provides information for Egyptians. 3. Put ( **/** ) or (**X**):

- 1. William Tyner is a cultural anthropologist only. ( )
- 2. Using technology in a positive way helps people to become genius. (
- 3. Digital communication is important for exchanging opinions. ( )
- 4. Digital tools are used to book tickets for trains, buses and planes. (



Digital citizenship

#### The important terms:



#### Digital citizenship:

- The ability to use digital technology in a safe & responsible way to get its benefits & to protect your digital footprint
- it helps you to protect your digital footprint.



#### Digital footprint:

- It's a record of everything you do online, which includes the websites you visit and everything you share with others.
- It may also include what others share about you.

#### How to deal with the internet:

- 1. Respect other people & be responsible.
- 2. Use the internet safely by: a. Setting strong passwords.
  - b. Use updated software.
  - c. Choose the websites you visit wisely.

#### **Rights**

- 1. No one can copy or share your digital footprint without your consent.
- 2. You have the right to interact with others online.
- 3. You have the right to receive & share information online.
- 4. You have the right to use the internet any time.

**<u>Hacking:</u>** The illegal use of content for the purpose of sharing or selling it.

## Responsibilities

- 1. Never hack protected content.
- 2. Respect others online.
- 3. Rate what you are watching.
- 4. Rate your use of the internet.

#### **Choose the correct answer:**

1)is the ability to use the ir	nternet in a safe & responsible way.
a. Digital technology	b. Digital citizenship
c. Digital tools	d. Digital footprint
2) Digital citizenship helps us to	•••••
a. get the benefits of digital techno	logy b. protect our digital footprint
c. a & b	d. no correct answer
3)is a record of everything y	ou do online.
<ol> <li>a. Digital technology</li> </ol>	b. Digital citizenship
c. Digital tools	d. Digital footprint
4) Digital footprint is	• • • • • • • • • • • • • • • • • • • •
a. a record for the websites you vis	it
b. a record for everything you shar	e with others
c. a & b	
d. no correct answer	
5) Which statement is wrong?	

a. We must set strong passwords. b. We must use expired software.

c. Choose the websites you visit wisely.

- 6).....is the illegal use of content for sharing or selling it.
  - a. We must use expired software
  - b. Hacking
  - c. Respect other people online

#### Put $(\checkmark)$ or (X):

- 1. Digital citizenship is the record of everything you do online. ( )
- 2. Hacking is the illegal use of content for the purpose of sharing or selling it. ()
- 3. We must respect others online. ( )
- 4. It is wrong to share your passwords with your friends. ( )
- 5. We must choose the websites we visit wisely. ( )
- 6.6 Any one can copy or share your digital footprint without your consent.

- , - , ,





In 2018, The Egyptian government provided the technology digital tools and sources that help you enjoy your time.

\*Digital Person: A person who uses ICT tools to learn and share.

### \*The importance of digital tools:



- 1. They can help a person with speech difficulties to communicate with others.
- 2. Learning the language at school using pictures.



3. Communicating with your teachers if you are unable to leave the house.

#### \*Digital Tools

## 1. Video Clips

- \* Importance: learning or teaching new things.
- You want to learn how to prepare a meal.
- You want to teach a skill you have to others.





## 2. Social Media

- a. Communicating with your classmates about a project outside school.
- b. Chatting with your friends via videos.
- c. Joining online groups with common interests.

## **Choose the correct answer:**

1)help people who have sp	eech difficulty to com	municate with others or learn
languages at school using pict	ures.	
a. Information b. W	atching videos	c. Digital tools
2) When we can't leave our house important.	es due to unexpected f	actors, become very
a. Egyptian Knowledge Bank	k b. library	c. digital tools
3)Each person who uses ICT too	•	· ·
a/an		
a. expert citizen in IT	b. digital person	c. programmer
4)Contains a d to access scientific materials.		
a. Egyptian Knowledge Ba	nk b. Library	c. Digital tool
5) We usein cor	nmunication with othe	rs via the internet through
voice, video or just writing.		
a. WhatsApp	b. Skype	c. a & b
2. Complete:		
(Digital tools - Egyptian gov	ernment - digital perso	on - EKB - social media)
1. Theprovio	led digital tools and re	sources to achieve an educational
system based on skills.		
2. A is a person w	tho uses ICT tools to le	earn and share
3help us to lear	rn languages at school	using pictures.
4contains a dig	gital library that helps	students, teachers and parents to
access all the scientific mate	rials.	
5. WhatsApp, Skype and Faceb	ook are examples of	

## 3.Put ( **>** ) or (**X**):

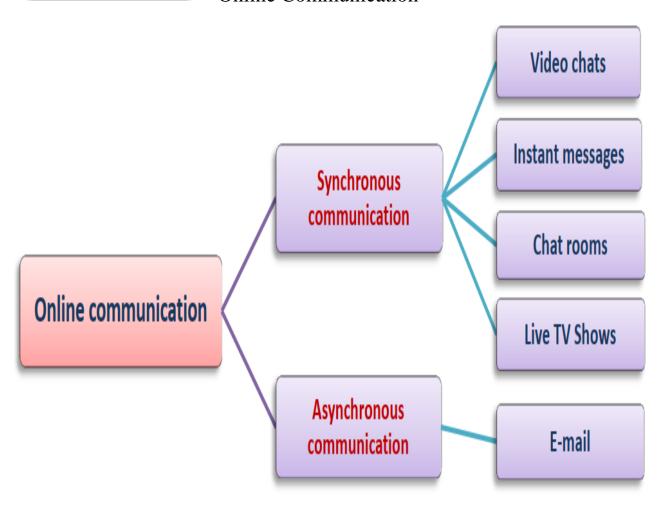
- 1) Digital technology is the person who uses ICT tools. ( )
- 2) The Egyptian government provided digital tools and resources. ( )
- 3) Digital tools can help a person with speech difficulty to communicate with others. (
- 4) When we can't leave our houses due to unexpected factors, digital footprint become very important. ( )
- 5) When you search YouTube to know how to prepare a meal, this is an example for teaching. ( )
- 6) We can chat with our friends using WhatsApp only. ( )

### 4.Match:

Column (a)	Column (b)			
1 Digital tools	a. When you search YouTube to know how to prepare a healthy meal.			
2 Digital person	b. When you upload a video on YouTube that explains phonetics.			
3 EKB	<ul> <li>One of the most important applications in the social media.</li> </ul>			
4 Egyptian government	d. They become very important when we can't leave our houses due to unexpected factors.			
5 Learning	e. It contains a digital library that helps students.			
6 Teaching	f. provided digital tools and resources to achieve an educational system based on skills.			
7 Facebook	g. A person who uses ICT tools.			



## Online Communication



#### Synchronous Communication

#### **Definition:**

- It is a communication that happens in real time by instant responses.
- Transfer of information or files between two persons at the same time by various digital tools such as:
  - Video Chats
  - Instant Messages
  - Chat Room
  - Mobil Application (cell phone)

## Asynchronous Communication

#### Definition:

- It is a Communication that doesn't require an instant response.
- Transfer of information or files between two or more persons without reply at the same time by various digital tools such as:
  - Sending file by e-mail
  - Recorded educational programs

#### Video chats:

- Allow you to communicate with one or more persons by a digital device.

#### **Needed Tools:**

- A digital device with camera and speakers.
- Cell phone application or video chat software.

#### Email:

- You can use email to send and receive messages.
- Messages are more formal than instant and text messages.

help you solve a problem.

- Send an email to ask a colleague to

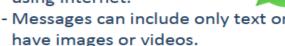
- Send an email to your teacher about

- Use an email to communicate with a

government agency or with an official.

#### Instant messages: (IM)

- Allow you to send messages using Internet.
- Messages can include only text or



#### **Needed Tools:**

- An instant messaging program on your computer or a mobile application.

#### **Needed Tools:**

For example:

school project.

- A web browser to access the email website.

#### OR

- Such as: Yahoo - Gmail - Hotmail



#### Chat rooms:

- Allow you to communicate with groups and discuss one topic only.

#### **Needed Tools:**

- Internet browser to access the Internet.
- OR an application for cell phone such as:

Internet Explorer or Google Chrome

Mobile Application (cell phone):It is an application that gives you direct access to various programs, such as e-mail, instant messaging, social networking pages and video chats.



#### Choose the correct answer:

1)is	an example of asynchronou	as communication.
a. Chat room	b. E-mail	c. TV show
2)	communication is sending	g messages between two or more people
at the same time	2.	
a. Synchronous	b. Asynchrono	us c. a & b
3) The internet is u	used to communicate in a/ar	1 way.
a. synchronous n	b. asynchronou	ıs c. a & b
4)is mo	ore formal than instant mess	saging and texting.
a. E-mail	b. Computer	c. Chat room
5)al	low you to communicate in	groups focusing on one topic usually.
a. Internet	b. Chat rooms	c. Mobile applications
6) To access the in	ternet, we use the browser.	
a. software	b. computer	c. Internet Explorer
7)allow	s you to communicate direc	etly with one or more people through your
computer.		
a. E-mail	b. Video chat c. Mo	obile application
2. Complete:		
(Video chat - Goo	gle Chrome - chat room - s	ynchronous - asynchronous)
1) E-mail is cons	idered an example for	communication.
2) Chat rooms &	video chats are examples for	orcommunication.
3)al	llows you to communicate v	with other people through your computer.
4)is	a group in which people tal	lk to each other about one topic.

5) .....is from the most important browsers.

## 3 Put ( **/** ) or (**X**):

- 1. Asynchronous communication is the communication that does not require an immediate response. ( )
- 2. The e-mail application cannot be accessed on your mobile phone. ()
- 3. Instant messaging allows you to send text messages only or add pictures or videos using the internet. ( )
- 4. Live television programs are a form of asynchronous communication. ( )

## **Making video chats**

LESSON\_(5)

How to use e-communication

### Steps to make a video chat:

- Make sure the microphone and camera are ON.
- Create <u>a link</u> to a video chat and send it to the participant (or participants).

### Steps to join a video chat:

- Make sure the microphone and camera are on.
- Click on its link and wait for the person who started the call to be 'let in'.
- You can also reply to the call by clicking on the phone/video icon.
- You can turn off the microphone or turn off the camera at any time.

### Video chat rules:

- Sometimes, the person in charge of the call may mute people's microphones.
- If the camera is on, anyone who is on the call will be able to see you.
  - Be properly dressed, and behave as if you were out in a public.
- Speak when it's your turn.
- Make sure that there is nothing in the background that points to your address or any personal information that you do not want to share.

## **Chat rooms:**

- You can simply write your comment and send it.
- You can reply to messages too.
- Some participants may also reply to your message.

## Chat rooms rules:

- Anyone who has access to the chat room will be able to read your messages.
- Be polite, helpful, and positive.

## **Instant messaging:**

It is a fun and informal way to communicate.

## Steps to send an instant message:

- Click on the name of the person you want to chat with.
- Type your message.
- Click the "Send" icon.

## Instant messaging rules:

- Use phrases instead of full sentences
- Use emotion icons or images for communicate
- It is important to show an ethical and responsible manner.

## **Email:**

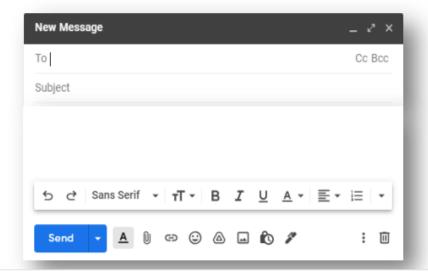
- It is common to use emails in more formal situations.
- Such as: creating an account with EKB to send an email to your teacher.

#### Steps to send an email to someone:

- Type their email address in "to:" line.
- Provide clear information of the message in the "subject:" line.
- When writing an email, make sure to use correct grammar.
- Click the "Send" icon.

#### Sending email rules:

- Be polite and clear.
- Use greetings and endings.
- Be sure when sending attachments that are safe and accurate.



#### **Choose the correct answer:**

1)	To start a	you must create a l	and send it to the
	participant(s).		
	a conversation	b chat room	c_video.chat

- 2) During the video chat, no one in the conversation will be able to see you if your camera is.....
  - b. turned off a. turned on c. no correct answer
- 3) You must act as if you are in a public place and dress appropriately in a video chat when the camera is.....
  - a. turned on b. turned off c. no correct answer

4) Anyone who has access ca	nn enter the
a. video chat b.	
	and informal way to communicate.
	Instant messaging c. no correct answer
	instant messaging c. no correct answer
a. c-man  Put (✓) or (X):	instant messaging c. no correct answer
•	hat without the need for permission from the person
who started the chat. ( )	
2. You must make sure that the	microphone and camera are on during the video chat
3. During the video chat, no one	e in the conversation will be able to see you if your
camera is turned on. ( )	
4. In chat rooms, you cannot rep	oly to messages. ( )
5. You cannot mute your microp	phone volume or turn off the camera in a video chat
6. To send an e-mail, you can us	se symbols and images. ( )
Choose from col	lumn (b) what suits it from column (a):
Column (a)	Column (b)
1 Chat room	a. It is a fun and informal way to communicate.
2 Video chat	b. We must use salutations and closings.
3 Instant messaging	c. Anyone can have access to join it.
4 E-mail	d. You have to click on its link and wait until you are "allowed to enter".
	a It contains a digital library that holes

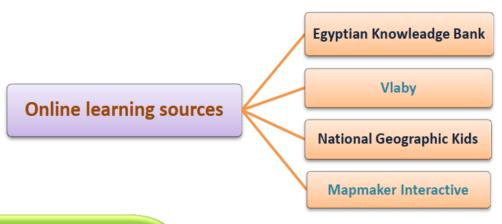
students.

## Online learning environments

Edmodo one of online learning environments that allow teachers and students to communicate, no matter where they are.



- Teachers can upload virtual lessons, quizzes and homework for students to access.
- Students can communicate with their teachers and post their completed assignments.



#### Online learning sources



#### Egyptian Knowledge Bank بنك المعرفة المصري

#### Egyptian Knowledge Bank (EKB):

- The first electronic library in Egypt that contains resources of variety of subjects.
- You can search and view different topics, digital articles and videos with just a click.



#### Vlaby:

- A virtual labs platform that enables students and teachers to do lab experiments in an interactive environment.
- It isn't only informative, it is fun too!



## **National Geographic Kids:**

 A popular online resource for kids to find information on a variety of subjects, about animals, science, history and geography.



## **Mapmaker Interactive:**

- A special interactive feature provided by National Geographic.
- Mapmaker Interactive provides online mapping tools for students and teachers.
- It allows using of map themes, data, and tools.

#### **Choose the correct answer:**

)provides online mapping tools for students and teachers.					
a. Mapmaker Interactive	b. Vlaby	c. Egyptian Knowledge Bank			
2) is a virtual laboratory platform that enables students and teachers to conduct laboratory experiments in an interactive environment.					
a. National Geographic Kids	b. Vlaby	c. Egyptian Knowledge Bank			
3)is the first electronic library in Egypt that includes many sources about various topics and information around the world.					
a. Interactive Map Maker	b. Vlaby	c. Egyptian Knowledge Bank			
4) enables teacher pupils to send their homew	•	ual lessons and upload tests and enables			
a. National Geographic Kid	ds b Edmo	do c. Egyptian Knowledge Bank			

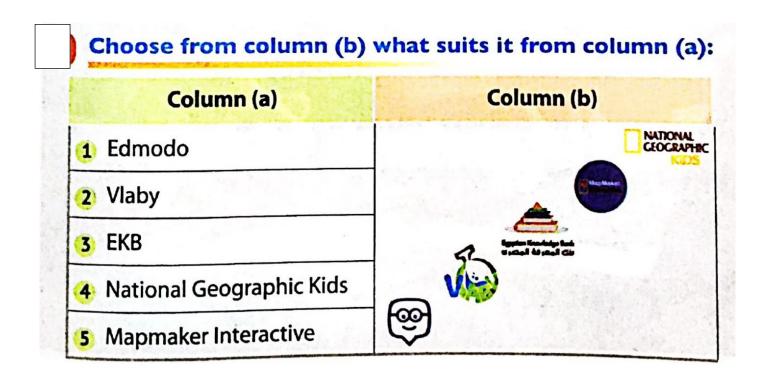
## **Put** (**✓**) or (**X**):

- 1. Edmodo is an online learning environment. ( )
- 2. Vlaby enables children to find information about topics such as animals, science, history and geography. ( )

#### **Complete:**

(National Geographic Kids - Edmodo - Vlaby - Egyptian Knowledge Bank - Mapmaker Interactive)

- 1) Students can communicate with their teachers and send their homework's on.....
- 2) .....allows the use of mapping tools.
- 3) ..... enables you to search for various topics and digital articles.
- 4) .....enables students and teachers to conduct laboratory experiments.
- 5).....is a popular online resource that enables children to find information on a variety of topics such as animals and science.





- It's important to plan before you do any digital research.
- Planning will help you focus your research on the information you're trying to collect.

### Steps to make a digital search for reliable content:

- **Focus** to choose the topic of your research.
- **Ask** yourself what did you know and what do you want to learn.
- Choose the types of online sources you will use.
- Collect the information that seems to answer your questions.
- Evaluate the information which you collect, is it reliable?
- Think and write notes.
- Write down what you're going to use from the source material.
- Cite the source of information in your notes.



Reliable Sources	Unreliable Sources
<ul> <li>Reliable sources are articles or information written and verified by experts.</li> </ul>	<ul> <li>You may find correct information on social media such as Facebook, wiki pages, and blogs.</li> </ul>
- The information is presented in a professional present.	- You also likely that you will find information full with opinions, mistakes and even lies.
<ul> <li>The source information is well-written without grammar and spelling mistakes.</li> </ul>	- You have to be careful when using the information you find in these types from sources.

## Organize and write your report

- After you've completed your online searching, gather your notes and reliable source information.
- Use your notes to write an <u>outline</u>. This will help you present the information in your report in a logical way.

#### Steps to write an outline of writing report:

- It should include an introduction that presents the topic of the report.
- It should include paragraphs that provide information.
- It should include a conclusion or final thoughts on the information you have presented.
- It should include the source of information that you write in your notes and document it in your report.

#### **Choose the correct answer:**

- 1) When doing a research, it is necessary to mention the..... in the final report.
  - a. articles
- b. outline
- c. sources of information
- 2).....are articles or information written and verified by experts.
  - a. Reliable sources
- b. The scheme
- c. Types of sources

- d. Unreliable sources
- 3).....is the first step of doing a digital research and obtaining reliable content.
  - a. Reliable source
- b. Defining the topic of the research
- c. The scheme
- 4) Social media sites such as ...... may include information full of opinions and errors.
  - a. Facebook

b. Wikis

c. a & b



## Synchronous and asynchronous communication

## Synchronous communication is appropriate:

- Between friends or close family members.
- When information is urgent or needs to be transmitted quickly.
- When information is about day-to-day life matters.
- When the answer doesn't require much thought or preparation.

## Asynchronous communication is appropriate:

- Between people who don't know each other well.
- When information is important but not urgent.
- When information is about sensitive or complex matters.
- When an answer needs to be thought and prepared.

#### **Choose the correct answer:**

- 1)..... communication is suitable when the information is urgent or needs to be conveyed quickly.
  - a. Synchronous
- b. Asynchronous
- c. No correct answer
- 2)..... communication is suitable between people who do not know each other well.
  - a. Synchronous
- b. Asynchronous
- c. No correct answer
- 3)Online learning environments include......communication(s).
  - a. synchronous
- b. asynchronous
- c. a & b

## Put $(\sqrt{})$ or (X):

- 1. Online learning environments include synchronous communication only. ()
- 2. The internet only allows us to communicate synchronous. ()
- 3. We use s synchronous communication when the information revolves around sensitive or complex topics. ( )
- 4. Synchronous communication is not always a good thing.()

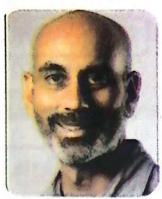
## Theme 4

## **Software Projects**

Lesson	1	Active Explorer
Lesson	2	Problem Solving Skills
Lesson	3	Providing Information
Lesson	4	Digital Applications
Lesson	5	Algorithms
Lesson	6	Programming Principles
Lesson	7	Graphic Art
Lesson	8	Creating Presentations

## Lesson 1

- Gautam Shah is the founder of 'Internet of Elephants' organization.
- >>> He worked as an IT specialist in many countries.
- Gautam Shah set up the Internet of Elephants to use technology and online games for wildlife conservation.



Gautam Shah

- Wildlife conservation: It is protecting animals in their natural habitats.
- Internet of Elephants creates unique mobile games using augmented reality and data visualization.
- Augmented reality allows you to virtually see real-world environments and provides information about them through screens and digital tools designed for this purpose.

#### **Choose the correct answer:**

- 1) .....is the founder of "Internet of Elephants".
  - a. William Tyner
- b. Gautam Shah
- c. Bill Gates
- 2) Gautam Shah is an expert in the field of......
  - a. train industry
- b. information technology
- c. agriculture
- 3) Gautam Shah uses..... to save the wildlife.
  - a. technology
- b. games

c. a & b



Problem-solving skills

### Taking steps to solve a problem:

1. Construct a hypothesis: a hypothesis is an educated guess about how thing work. It is an attempt to answer your question.

- 2. Test your hypothesis: Don't take any test that puts you at risk
- 3. Was your test successful? If not, don't worry, we learn from our mistakes.

#### **Breaking down the problem down into smaller sections:**

- Some ICT problems may be more complicated than others. Work on solving such problems in small sections, step-by-step

## Put $(\checkmark)$ or (X):

- 1)Problems should not be divided into small parts so as not to be difficult to solve. (
- 2) If you divide the big problem into several small tasks, it will become easier to solve.
- 3) Any big problem should be left without solving it. ( )



#### When creating your poster or billboard, think about the following digital concepts:

#### Margins

- A margin is the space left around the edges of a poster or billboard.
- It is important to leave this space empty.
- If you add content too close to the edges, the poster or billboard will look cramped and crowded.
- A 25 mm margin will help design a good poster.

#### Font size and type

- If you choose a small font size, your audience will have to work hard to try to read the information.
- If you choose font size that's too big, you will have to shorten the information you share.
- Make sure to choose a font size that is easy to read.
- Simple is better, a complicated font is distracting and hard to read.

#### Colors

- Choose colors that help you get your message across.
- Use color combinations that match.
- It is best to use no more than three colors in the poster.
- Take in consideration the color of the background when choosing the font color.

## **Images**

- Use images that match with the content you are sharing.
- Use clear, good-quality and appropriate images.

## **Choose the correct answer**:

1) When you present better.	information, you	will need	to present th	e information
a. mobiles	b. digital tools	c. la	aptops	
2)We use	<b>O</b>			
a. colors and pi	ctures b. a	set of fonts	c. a & b	
3)To design a digital	l poster or billboa	ırd, you will ne	eed an updated	•••••
a. computer	b. margin	c. picture		
4)is the spa	ce between the ed	lges of a poster	r or billboard and it	s content.
a. Poster content	b. Billb	oard backgrou	nd c. Margin	
5)Microsoft 365 pro	gram include a pa	ackage of appli	cations, such as	program
a. Publisher	b. Word Proc	essor c	. a & b	
6)Make sure to chood digital billboard.	ose the size of the	font so it's	when designing	ig a poster or
a. very small	b. easy to	be read	c. very large	
<u>Put (<b>✓</b>) or (X):</u>				

- 1.We don't need images and colors to design a poster or digital billboard.()
- 2. When creating a digital poster, it is preferable to choose a very small font. ()



#### **Digital applications**

#### **The information Sources**

#### Print

**Books - Articles - Newspapers - Encyclopaedias** 

#### The Internet

**Search Engine - Specialized Websites** 

Digital Learning Websites - Egyptian Knowledge Bank

#### **Interviews**

With people who have experienced, Affected, or who have studied the topic.

#### **Using Microsoft Word & Microsoft Excel**





- Excel allows you to create a spreadsheet with as many columns and rows as you need.
- Excel is used to present numbers because it is able to add them automatically.
- Spreadsheets are an excellent way to gather information and gather your ideas.



#### Mirosoft Word:

- Word allows you to present your ideas in a variety of ways.
- Word is commonly used to write whatever you want.
- You can You can change the design, add images, and link your report to websites or information on the Internet.

## **Choose the correct answer**:

algorithms to provide results.

specific tasks.

Computers and applications use algorithms to perform

1 nr	ogram is used for wri	ting and you can cha	ange the design and add
images.	Schull is used for wir	ing and you can one	ange the design and add
1	b. Excel	c. Photoshop	)
2. The explorer se	arches about topics in	-	
_	b. publications		
3. Books, articles,	newspapers are exam	ples for	••••
a. publications	b. Word	c. internet	
4pro	gram allows you to c	reate a spreadsheet o	consisting of as many
columns and ro	ws as you need.		
a. Word	b. Excel	-	
	is/are a source of in		
a. Publication	b. Egyptian	Knowledge Bank	c. The explorer
2 Put ( <b>✓</b> ) or ( <b>X</b> ):			
	irces should not be ev		
-	tware is an excellent	way to gather inforn	nation and gather your
ideas. ( )			• ()
3) The explorer us	es the internet or pub	lications to research	a topic. ()
	LESS	<u>0N (5)</u>	Algorithms
** Almonishma 141		ar a malada kan ra	ala, as tanale
»» Algorithm: if	s a series of steps th	at explain now to	ao a fask.
<ul><li>When you r</li></ul>	nake a meal, you f	ollow a recipe, tha	t is a
type of algo	•	,	
<ul><li>When you</li></ul>	type keywords, th	e search engine	uses



## How to prepare a falafel sandwich.

- $igoplus_{0}$  Prepare the ingredients you will need to make the falafel sandwich.
- Put the bread on the plate.
- Open a loaf of bread.
- Q Put the quantity you want of the falafel patties in the bread.
- Grind the falafel patties after placing them in the bread.
- Add tahini and salad.



1 ...... are a set of arranged steps to solve a problem. a. Search engines b. Algorithms c. Keywords d. Sentences

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- 2 You can type ...... into the search engine to search for information online.
  - a. keyboards b. algorithms c. keywords

- 3 When you prepare a meal, you follow a recipe; this is considered as القامرة - الشروق 2023)
  - a. augmented reality b. algorithm c. digital blogging d. order
- An algorithm is a/an ..... to do a task.

  - a. series of steps b. software c. application . d. hardware
- 5 Which of the following is considered an algorithm?
  - a. Seeing a movie

b. Solving a math problem

c. Eating breakfast

- d. All of the previous answers
- 6 A/An ..... is a series of steps that explain how to do a task.
  - a. agorithm
- b. introduction c. conclusion
- d. paragraph

## Put (√) or (x):

- Search engines use algorithms to deliver relevant results for your keywords.
- The steps of preparing a falafel sandwich are not considered an algorithm.
- 3 Many daily activities, like giving directional signals, are considered types of algorithms.
  ( )
- When you solve a problem in math class, this is considered a type of algorithm.
  (الدقهلية طلخا 2023) (



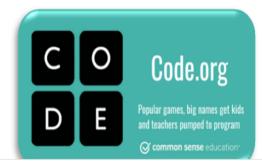
The principles of coding

## The important terms:



#### Coding:

- It is writing of multiple algorithms to make a complete program.
- You can create animations, movies and video games using code.
- There are many websites like **Code.org** that can help you learn to code using different programming languages.



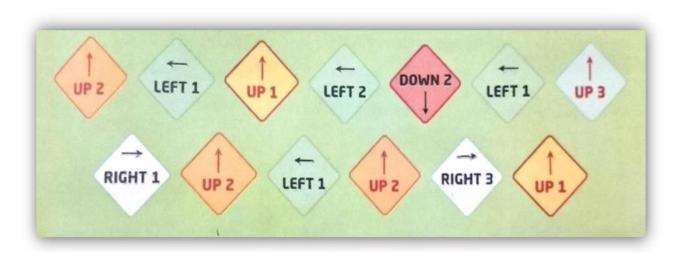
You can create mazes on Code.org. Mazes are just one example of things you can create using coding.

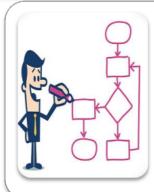
OUT

#### Example:

- Think about the steps you can use to get through the maze.
- The steps contain the number of spaces to take, and in which direction.
- Follow the steps to get through the maze.

#### Instructions to solve a maze:

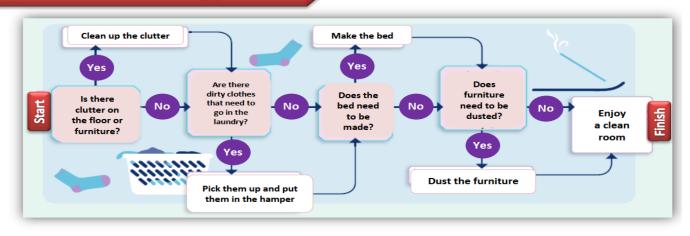




#### Flowchart:

- A flowchart is like coding, It represents a problem in logical and simple steps.
- A flowchart is a visual diagram that shows the steps of any process from beginning to end to solve a problem.
- It is using process boxes, flow lines/arrows and other symbols.

#### A flowchart about cleaning your room:



#### **Choose the correct answer:**

1) is writing	ng multiple algorithms t	to create a complete program	
a. Windows	b. Word processing pr	ogram c. Programming	
2) Many websites like.	help you	ı learn coding.	
a. Code.org	b. Excel c	. Word	
3) Online video games	are created using		
a. Excel	b. programming	c. Word	
4) The that you see are built using codes.			
a. animations	b. movies	c. (a) and (b)	
5) You can	at Code.org.		
a. design a billboa	ard b. create max	zes c. play a game	
ort (AA) or (V).			

#### **Put** (**✓**) or (**X**):

- 1) Computers, like humans, use different languages.
- 2) There are many websites, such as Facebook.com, that can help you learn different programming languages. ( )
- 3) The video games that you play over the internet were made by programming. ( )
- 4)The cartoons and movies you watch online are designed by Excel.( )



#### **Graphic art**

## **Microsoft Paint**

It's a popular graphics editor. It's easy to create your own drawings or edit images on computer.

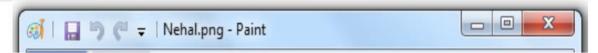
#### Steps To Open Microsoft Paint:

- Open Start-up Menu.
- Click Accessories.
- Click Paint.

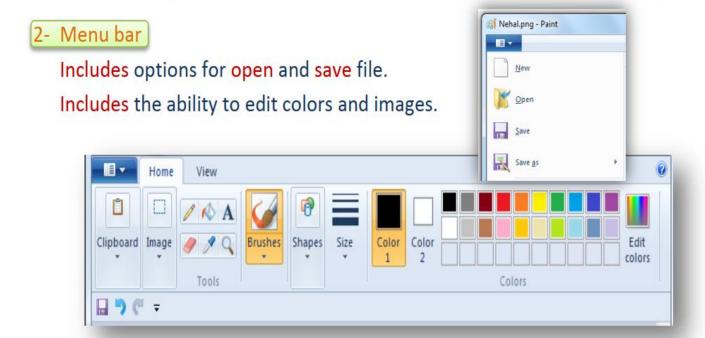


## The components of Microsoft Paint screen:

#### 1- Title bar



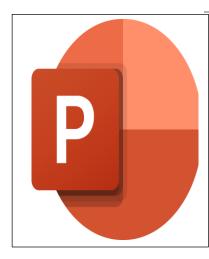
Includes file, program name & control buttons Like Word and Excel program



3- Toolbox. Includes	all the tools that you will ne	ed to make y	our drawing.
These are some	e of the tools:		
	Ellipses Use to draw a circle or an oval shape.		Rectangle Use to crop an area of the photo.
	Magnifier Use to zoom image in or out.		Airbrush Use to a free draw.
	Pencil Use to a free draw.	+	Select Use to select and move objects.
SS	Line and curve Use to deaw lines and curves.	A	Text Use to write a text.
rd	Fill Use to fill colors using the color options	$\Diamond$	Eraser Use to erase line or mistakes in drawing.

## **Choose the correct answer:**

1) Thepr	rogram is one of the po	pular programs in	editing pictu	ires and graphics.
a. M	licrosoft Paint	b. Word	c. Excel	
2) When yo	ou open Microsoft Pain	t, you will notice t	hat the top o	f the opening
screen is	similar in design to			
a. V	Vord processor	b. Excel spreads	heets	c. a & b
3) The open	ning screen of the Paint	program includes		• • • •
a. to	olbox only	b. menu bar only	c	. a & b
4) The	is a list used	to open the Paint	program.	
a. inser	t b. Start	c. File		



#### Microsoft PowerPoint:

- Microsoft PowerPoint allows you to create presentations that include text, animations, images and special effects.
- A slide is a presentation page that contains text and images.
- On the left side of the screen, you will see a thumbnail, or preview image, of each slide you're creating.

#### **Choose the correct answer:**

1)is a progra animation effects.	m used to design preser	ntations that include texts and	
a. Word processing	b.Excel spreadsheets	c. PowerPoint	
2) A is a present	ation page that contains	your text and images.	
a. billboard	b. slide	c. sheet	
3) You will notice that there is a at the top of the opening screen of the program.			
a. Menu bar	b. subtitle sectio	n c. a & b	

## Put $(\checkmark)$ or (X):

- 1) PowerPoint is used to design presentations with texts only. ()
- 2) You cannot insert images you created through another program into your presentation in PowerPoint. ( )
- 3) PowerPoint provides many design options for each slide, including background colors. (