This is a Class 1 exam

Lebanon Evangelical School for Boys and Girls

...lighting the fires that burn for eternity...

Loueizeh - Baabda

Lebanon Evangelical School

for Boys and Girls Loueizeh - Baabda

SE01 Exam

09NOV2026

Do NOT write in this box. Your MARK will be placed here.

Subject :	Science
Class :	6A, 6B and 6C
Teacher :	Tima Mokdad
Duration :	1 hour

Remember to write your answers on a seperate lined sheet.

You are to answer the questions to this exam on : Lined paper

Your name :		*Time taken to complete exam*
Your Class :		
Exam Room :		
How many sheets, including cover sheet :		

- Do not open this paper until the teacher in charge instructs you to do so.
- The most important thing to remember in taking an exam is NEVER PANIC.
- If you are caught cheating in this exam, you will be awarded zero for ALL exams that are taken on this day.

Exercise 1: Choose the letter of the correct answer. (10pts)

1- What is the effect of Earth's *rotation*?
   A. Tilt in the axis.
   B. Day and Night
   C. Change in seasons
   D. All of the above

2- Which statement best ***distinguishes*** rotation from revolution?
   A. Rotation is Earth's yearly orbit, while revolution is its daily spin.
   B. Rotation is Earth's yearly spin, while revolution is its daily orbit.
   C. Rotation is Earth's daily spin, while revolution is its yearly orbit.
   D. Rotation and revolution are both Earth's motion in space.

3- What causes change in Earth's seasons?
   A. Earth's rotation
   B. The sun moving towards Earth
   C. Earth's tilted axis as it revolves around the Sun
   D. Earth's liquid water

4- What is the duration of the Moon's orbit around Earth?
   A. 29.5 days
   B. 27.3 days
   C. One month
   D. One year

5- What statement best describes a solstice?
   A. Day and night are equal.
   B. Earth's axis is vertical and no longer tilted.
   C. The Sun is shining equally at both Northern and Southern Hemispheres.
   D. One hemisphere experiences its longest or shortest day.

6- All planets orbit the Sun due to:
   A. Sun's gravitational pull
   B. Black holes around the Sun
   C. Sun's hot temperature
   D. Sun's bright light

7- What are the effects of the Moon on Earth?
   A. Moon phases
   B. Solar and Lunar Eclipses
   C. Tides
   D. All of the above

8- What moon phase is usually associated with Spring Tides?
   A. New moon
   B. Waxing phases
   C. Waning phases
   D. Third Quarter

9- What is considered to be a condition for a Solar eclipse to take place?
   A. Moon, Earth and Sun are perfectly aligned.
   B. Moon must be in full moon phase.
   C. The Earth is blocking light from the moon.
   D. It must take place at night.

10- What seasons begin at an equinox?
   A. Summer and Spring
   B. Spring and Autumn
   C. Winter and Spring
   D. Summer and Winter

Exercise 2: Give the term defined by each of the following statements. (10pts)

1- A large sphere of hydrogen gas with nuclear reactions taking place at its core.
2- The unit that refers to the distance from Earth to the Sun.
3- The unit that refers to the distance light travels in one year.
4- The color of the hottest star.
5- A collection of stars, space dust and gas.
6- Formed from a giant cloud of gas and dust pulled together by gravity, having a star in its center, surrounded by planets and other objects.
7- Spherical objects that orbit the Sun and share their orbital paths with other objects.
8- An object that forms a tail of water when it comes near the Sun.
9- The location where comets are mostly found in the Solar System.
10- The only planet that has life existing on its surface.

Exercise 3: Complete the following paragraph. (12pts)

There is only one __(1)__ in our Solar System, around which all planets and dwarf planets orbit. Planets are divided into two main groups: __(2)__ and __(3)__ separated by the asteroid belt between __(4)__ and Jupiter. Many of these planets have natural satellites known as __(5)__ orbiting around them. There are other objects in the solar system such as comets, asteroids or meteoroids. A shooting star appearing in the sky is called a __(6)__ which is the result of a meteoroid that has entered Earth's atmosphere.

Our Solar System is a small part of the __(7)__ galaxy, which is a spiral galaxy. This type of galaxies is known to have __(8)__ stars in its center, and __(9)__ in their arms. There are other types of galaxies in the Universe such as __(10)__ or irregular galaxies.

The Universe is composed of billions of galaxies. Galaxies are grouped to form __(11)__, that are pulled together to form __(12)__, which form enormous sheet-like walls in space.

Exercise 4: Tell whether each of the following statements is *true* or *false*. Then *correct* the false statements by changing the *underlined words*. (8pts)

1- Mars is known to be the red planet due to the presence of iron oxide in its rocks.

2- Jupiter is the outer planet known to rotate sideways.

3- Inner planets are faster to rotate than outer planets.

4- Neptune is the planet that resembles Earth's Moon.

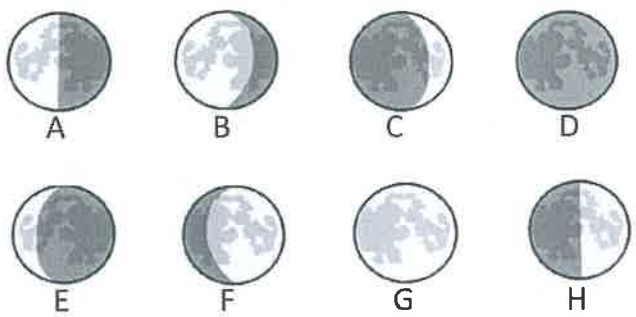
5- The Sun is a red star.

6- Venus and Mars are known to be the only planets that do not have moons.

7- Saturn is the planet known to have the highest number of moons.

8- Jupiter is the biggest planet in our Solar System.

Exercise 5: Use the Moon Phases diagram and your knowledge to answer questions about the Moon. (9pts)



1- List the three letters corresponding to the waxing phases of the moon.
(*Use the letters, do not write the name of the phases*)

2- Label the phases **B**, **C** and **D**.

3- Indicate the type of *eclipse* that may take place when the moon is at phase **G**.

4- Explain what *tidal* changes may take place when the moon is at phase **A**.

Exercise 6: Read the following text, then answer the questions that follow. (2pts)

There are billions of stars in the galaxy. Sirius is a star about 8.6 light-years from Earth, Vega is another star about 25 light-years away, and Earendel is 12900 million light-years away.

1- If a new star is born directly next to Vega right now in space, when will we be able to see it from Earth?

2- Pick out from the text the name of the farthest star from Earth

Exercise 7: Refer to the diagram and your knowledge to answer the following questions (3pts)

1- What is the measure of the tilt in Earth's axis?

2- What season is it in the *Southern Hemisphere*? Justify your answer.





Exercise 8: Answer the following questions. (6pts)

1- Name the theory that explains how the Universe began expanding.

2- Differentiate between *inner* and *outer* planets using one property.

3- Explain briefly why Venus is the *hottest* planet and not Mercury.

4- Compare and contrast the color of *Earth* to that of *Neptune*.

SE01/20262027/Science (/60)

_Exercise 1:

1_B	6_A
2_C	7_D
3_C	8_A
4_B	9_A
5_D	10_B

(10 pts : 1 pt. each)

_Exercise 2:

1_ Star	6_ Solar System
2_ AU	7_ Dwarf Planets
3_ Light-year	8_ Comets
4_ Blue	9_ Kuiper's Belt / Beyond Neptune
5_ Galaxy	10_ Earth

(10 pts : 1 pt. each)

_Exercise 3:

1_ Star	6_ Meteor	11_ Clusters
2_ Inner	7_ MilkyWay	12_ Super Clusters
3_ Outer	8_ Red / Old	
4_ Mars	9_ Blue / Young / New	
5_ Moon	10_ Elliptical	

(12 pts : 1 pt each)

_Exercise 4:

1_ True (1)
2_ False (0.5); Uranus (0.5)
3_ False ; revolve / orbit
4_ False ; Mercury
5_ False ; Yellow
6_ False ; Venus and Mercury
7_ True (1)
8_ True (1)

(8 pts : 1 pt each)

_Exercise 5: (9 pts)

1_ C , F , H (3 pts : 1 pt. each)

2_ B: Waning Gibbous _ C: Waxing Crescent _ D: New moo
(3 pts : 1 pt. each)

3_ Lunar Eclipse (1 pt.)

4_ Neap tides (1) occur, so high tides appear lower (0.5) and low tides appear higher. (0.5)
(2 pts)

- Exercise 6:

1- After 25 years.

2- Earendel. (2 pts : 1 pt. each)

- Exercise 7: (3 pts.)

1- 23.5° (1 pt)

2- Summer (1 pt).
The axis in the Southern Hemisphere is pointing towards the Sun. (1 pt)
(Any other correct explanation)

- Exercise 8:

1- Big Bang (1 pt)

2- Inner planets orbit the Sun in a shorter period of time than outer planets because they are closer to the Sun. (2 pts.)
(Any other correct difference)

3- [Mercury doesn't have (0.5) an atmosphere], so it can't trap heat, whereas [Venus has a thick (0.5) atmosphere rich in carbon dioxide], so it can trap heat and thus is the hottest planet. (1 pt.)

4- Both Earth and Neptune are blue in color.
Earth is blue because of the water, whereas Neptune is blue due to high amounts of Methane gas.
(2 pts: 1 Pt. for the Similarity & 1 pt. for the difference)