



DARUL HUDA ISLAMIC SCHOOL, AL AIN  
GRADE: IX  
SUMMER HOLIDAY ASSIGNMENT



**ENGLISH**

1. Read the story *Iswaran the story Teller* from your Supplementary textbook '*Moments*' and '*The Snake and the Mirror*' from **Beehive**. Then, present the main themes and characters of the stories using a **web chart/mind map**. The distinctive character traits of the main characters and the main themes should be neatly organised such that a person who is not familiar with the lesson should be able to get the gist by just looking at it. Please **DO NOT** write the summary of the story.

2. Collect five dailies of *Khaleej Times* and design a word puzzle, comprising a minimum of 15 words. It can be a crossword, a Jumbled word game, a rebus or a word search. You should read and collect the words only from the *Nation Page* in the daily and the news must be related with *UAE*. The game must provide interesting clues/instruction to the readers to help them figure out the correct answer.

**Please Note:** The assignments must done in the English Language Notebook Only. Please **DO NOT** submit on loose sheets/files/folders.

The homework must be presented neatly and creatively.

The following websites can be used while designing the word games.

- <https://crosswordlabs.com/>
- <https://thewordsearch.com/maker/>
- [http://rebus1.com/en/index.php?item=rebus\\_generator](http://rebus1.com/en/index.php?item=rebus_generator)
- <https://www.khaleejtimes.com/nation>

## **Science and Technology**

### **Physics**

1. Prepare a research project on
  - (a) Motion of celestial bodies.

Or

- (b) Physics behind the rides in amusement parks.

### 2. Practicals

Record the following experiments:

1. To verify laws of reflection of sound.
2. To determine the density of a solid (denser than water) by using a spring balance and a measuring cylinder.
3. To establish the relation between the loss in weight of a solid when fully immersed in
  - (a) tap water
  - (b) Strongly salty water, with the weight of water displaced by it by taking at least two different solids.
4. To determine the velocity of a pulse propagated through a stretched string/slinky.

## **CHEMISTRY**

1. There are many states of India and foreign countries where sea water needs to be converted into drinking water. Write an assignment on how we can get drinking water from sea water making use of minimum amount of energy.

Hint: distillation under reduced pressure, reverse osmosis

2. Make a report on the topic “ Plasma Televisions are better than LCD and LED televisions”
3. Complete your Practical Record Book as directed by your teacher.

## **BIOLOGY**

1. What are Stem Cells? What are the common misconceptions with using cells.  
Research and make a report on Stem Cell Theory Treatment.

## II. RECORD THE FOLLOWING EXPERIMENTS.

1. Preparation of stained temporary mounts of a) onion peel b) human cheek cells.
2. Identification of Parenchyma, Collenchyma, Sclerenchyma, Striped muscle, Smooth and Cardiac muscle fibers and Nerve cell.
3. Study of the characteristics of a) Spirogyra b) Moss c) Pinus with male cone  
d) Angiospermic plant. Drawing and providing two identifying features of the groups they belong to.
4. Observe the given pictures of Earthworm, Cockroach, Bony fish and Bird.  
Draw each of the organism and record:
  - a) One specific feature of its phylum.
  - b) One adaptive feature with reference to its habitat.

### Social Studies

(Geography)

Prepare a graph showing the population of all Indian states and fill the columns comparing the map with the population of other world countries which are matching (approximately) with the population of each state.

reference: 2011 census data.

#### Rubrics

Data collection	2
comparison	4
presentation	4
Total	10

Sl No:	Indian states	World countries
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### Islamic Studies

<b>IX (To Memorize)</b>	<b>سورة الإنفطار</b>
	<b>WHILE SEEING A SERIOUS PATIENT</b> الحمد لله الذي عافاني مما ابتلاك به ، و فضلني على كثير ممن خلق تفضيلا

### Moral Education

**Moral education is a course aimed at encouraging students to develop their character, explore their values and be better prepared for adult life. The below given task is a research work to develop a greater understanding of moral values for a worthy social coexistence.**

**Task Introduction:** The UAE is a land of tolerance .The country actively promotes it. Conferences, programmes, activities — even sports tournaments — are held extolling tolerance as a value. At the institutional level, the country has adopted a National Tolerance Programme. 2019 is being observed as the year of Tolerance in the UAE.

**The Task:** Do a research on ‘The UAE: Vision of Tolerance’ and prepare a detailed write-up in about 200 -250 words substantiating your description with appropriate examples.

### Mathematics

1. Rationalise the denominator
  - a)  $\frac{3}{\sqrt{3}-\sqrt{2}}$
  - b)  $\frac{1}{6+\sqrt{5}-\sqrt{11}}$
2. If  $x = 9 - 4\sqrt{5}$ , find the value of  $x - \frac{1}{x}$
3. Factorise completely
  - a)  $x^3 - 4x^2 + 5x - 2$
  - b)  $x^3 - 9x^2 + 26x - 24$
4. Expand
  - a)  $(3a + 4b)^3$
  - b)  $(5p - 3q)^3$
  - c)  $(4a - 2b - 3c)^2$
5. Plot the points P(-5,-2),Q(1,-2),R(6,4),S(0,4).Join the points to get PQ,QR,RS,SP.Name the figure so obtained.
6. Find the value of  $P(t) = 4t^3 - 7t^2 + 12t - 25$  at  $t = -2$
7. Find the quotient and remainder if the polynomial  $3x^4 - 4x^3 - 3x - 1$  is divided by  $x-1$
8. Show that  $2$  and  $\frac{-1}{3}$  are the zeroes of the polynomial  $3x^3 - 2x^2 - 7x - 2$ . Also find the third zero of the polynomial.
9. Plot the points P(-1,0), Q(0,1) and R(2,3) on the graph paper and check whether they are collinear or not.
10. Simplify  $\frac{(a^2-b^2)^3 + (b^2-c^2)^3 + (c^2-a^2)^3}{(a-b)^3 + (b-c)^3 + (c-a)^3}$
11. If  $a + b + c = 15$  and  $a^2 + b^2 + c^2 = 83$ , find the value of  $a^3 + b^3 + c^3 - 3abc$ .
12. Draw UAE national flag in a graph sheet and colour it. Write the coordinates of each rectangular part and find the area. What is the total area of the flag?

**UAE SOCIAL STUDIES -**

**GRADE 9**

1. **Research:** Conduct a research on historical monuments in the UAE.

( Support your views and studies with relevant pictures )

**RUBRICS:**

<b>CONTENT</b>	<b>5</b>
<b>PRESENTATION</b>	<b>5</b>
<b>TOTAL</b>	<b>10</b>