



# Holiday Homework 2018-19 8TH GRADE



# **SOCIAL STUDIES**

## **TOPIC: Voyage of Rivers**

**Students will do the research work on any one of the following river of their choice.**

**This research will make you understand the importance & significance of rivers in our lives and their history.**

## **China—Yangtze, Yellow river, Heilongjiang River, Zhujiang River**

**Powerpoint presentation—should include the following topics.**

- **River pictures.**
- **Picture essay on a river of your choice**
- **Economic and social issues related to the river and impact of modern day changes on sustainable development of places located around rivers.**
- **Poem on voyage of rivers.**
- **Imagine yourself a quiz master of a popular TV show . Prepare a set of 10 questions on a river of your choice to conduct the quiz competition. Include the questions in your presentation.**

**Topic- legacy of WW1**

**Draw a poster on the ‘legacy of WW1 ‘**

**You will judged on Creativity, analysis and reflective skills through poster making.**

# ICT

## PROJECT-1

Design an HTML page that displays a table containing the details of different books in the library.

For example, you have a table something like this-

### LIBRARY

<u>S.No</u>	<u>SUBJECT</u>	<u>BOOK NAME</u>	<u>AUTHOR</u>
<u>1</u>	<u>HISTORY</u>	<u>Ancient Civilization</u>	<u>A.C.Dutta</u>
<u>2</u>	<u>GEOGRAPHY</u>	<u>Comprehensive Geography</u>	<u>C.V.George</u>
<u>3</u>	<u>SCIENCE</u>	<u>A Text Book of Physics</u>	<u>Ashit Deb</u>
<u>4</u>	<u>SCIENCE</u>	<u>Organic Chemistry</u>	<u>Sohil Dutt</u>

Each of these books is hyperlinked to another page that displays the Content of that book. The Content of the book may be an Ordered or Unordered list or both. Whenever a Book Name is clicked, it opens up a new browser window showing the content of that book.

## PROJECT-2

Design a COMPUTER TUTORIAL in the form of a website. The main page is linked to four other pages.

MAIN PAGE.HTML ----- Computer Software.html  
MS Access.html  
Photoshop.html  
Visual Basic.html  
More on HTML.html

Whenever a link is clicked, it opens up a new browser window showing the information to the related topic in the form of tutorial.

## **PROJECT-3**

Design an HTML page that displays THE STORY OF CRICKET.

Structure of the Website is given below-

CRICKET.HTML-----INTRODUCTION OF CRICKET.HTML ----- TEST.HTML  
ONE DAY.HTML  
TWENTY20.HTML  
WORLD CUP.HTML

# ENGLISH

**ASSIGNMENT 1: Write a story on the topic given below in about 200-250 words:**

**'We were now late and Mum had started to panic.....'**

**ASSIGNMENT 2: Write an article for the school magazine on the following topic:**

**Amy had visited a hill station recently. She was disturbed to see the plight of the green forest. She wanted to write a short article for her school magazine on 'Trees and Their Importance'. As Amy, write the article in about 150-200 words.**

# HINDI

- शहीद भगत सिंह' या 'द गांधी' फिल्म को देखकर अपने विचार एक निबंध के रूप में लिखिए ।
- अपने मित्र को अपने स्कूल भ्रमण (अपनी अमृतसर की यात्रा)या किसी भी यात्रा के बारे में बताते हुए पत्र लिखिए ।
- निम्नलिखित कठिन शब्दों के अर्थ लिखिए :-  
शीतल , छुआछूत ,स्वच्छ, वायु, बीमारी ,अकाल ,समस्याएँ, प्रयोग, आविष्कार, रसायनों, त्मकथा,परेशान,चंगुल ,,भावना,सहभागिता,निगरानी ,चिंता ,मौखिक,संस्कृत ,देवनागरी ,लिपि, उचित,उपाय ,सरोवर,कामना ,शौक ,तलाश ,साक्षात्कार ,गंभीरता, सशक्त, शीर्षक, अजरज, वक्तव्य, टिप्पणी ।

गृहकार्य booklet form में submit करे

# SCIENCE

## Chemistry

### Assignment:

Using Bohr's Model template for Structure of Atom, draw the structure of atom on a Chart paper for the following elements. Please use three different colors for electrons, protons and neutrons. Assign a code for protons, neutrons, and electrons:

The following atoms are to be drawn:

Helium

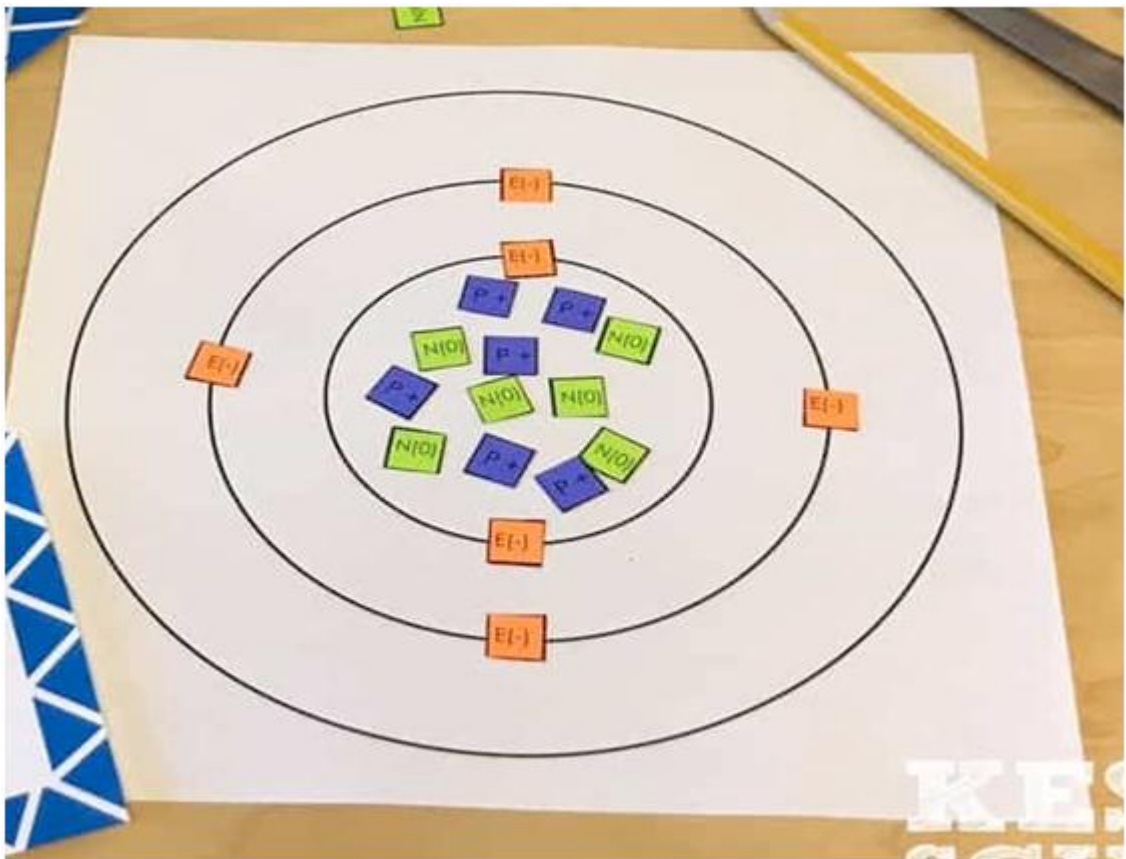
Carbon

Sodium

Calcium

Neon

Use the image attached for your reference.



**Answer the following questions**

1.

Petronella investigates several indicators.

She finds this table on the internet.

indicator	pH 1	pH 4	pH 7	pH 10	pH 13
Methyl Orange	red	yellow	yellow	yellow	yellow
Phenolphthalein	colourless	colourless	colourless	pink	pink
Universal Indicator	red	orange	green	blue	purple

(a) Petronella tests a liquid with some of the indicators.

The table shows her results.

indicator	colour of the indicator in the liquid
Methyl Orange	red
Phenolphthalein	colourless

Estimate the pH value of the liquid.

..... [1]

(b) Litmus is another indicator.

Complete the sentence about the colour of litmus.

Litmus is ..... in acid and ..... in alkali. [1]



2.

This question is about elements.

(a) Draw straight lines to match the **element** with its correct **chemical symbol**.

element	chemical symbol
neon	N
nitrogen	Ne
sodium	Na
	S

[2]

(b) Magnesium will displace iron from iron sulfate solution.

Complete the word equation for this reaction.



[2]

(c) Copper is placed in iron sulfate solution. There is no reaction.

Why is there no reaction?

Tick (✓) the box next to the correct sentence.

Copper is higher in the reactivity series than iron.

Copper is more reactive than iron.

Iron is more reactive than copper.

Iron sulfate is higher in the reactivity series than copper sulfate.

[1]

3.

Look at the information about different atoms.



Use the information above to answer the following questions.

(a) Which **two** atoms have 10 neutrons in their nuclei?

..... and ..... [1]

(b) Which atom has six electrons in its outermost shell (orbit)?

..... [1]

(c) Which atom is found in Group 1 of the Periodic Table?

..... [1]

(d) Some atoms have the same numbers of protons and neutrons.

There are **two** of these types of atoms in the list.

Which two?

..... and ..... [1]

(e) Which **two** atoms have three electron shells around the nucleus?

..... and ..... [1]

4.

Jamila investigates the reaction between zinc and sulfuric acid.

The reaction is very slow.

She wants to find out if copper is a catalyst for the reaction.

She does one reaction with copper and one without copper being added to the zinc and sulfuric acid.

Jamila measures the time it takes for the reaction to finish (the reaction time).

Here is her results table.

reaction mixture	reaction time in seconds
zinc and sulfuric acid	280
zinc, copper and sulfuric acid	50

Many factors affect the rate of reaction.

Write down three **variables** that must be controlled in this investigation.

1 .....

2 .....

3 .....

[3]

5.

There are many different types of chemical reaction.

Complete the sentences about types of reaction.

Choose words from the list.

burning

displacement

endothermic

exothermic

fermentation

neutralisation

(a) The reaction between an acid and an alkali is called ..... [1]

(b) The reaction between iron and copper sulfate to form iron sulfate and copper is called  
..... [1]

(c) When baking powder reacts with vinegar the mixture gets colder.  
This is because the reaction is ..... [1]

6.

Which scientist discovered the structure of the atom?

Circle the correct answer.

Darwin

Einstein

Pasteur

Rutherford

[1]

# BIOLOGY

## Learning Outcome 1

- Plants often compete with each other for light and space, and for water and nutrients from the soil.

*Complete the sentences by using the words from the box below.*

compete    supply    food    space    photosynthesis

Plants can make their own f \_\_\_\_\_ by the process called p \_\_\_\_\_ .

They need light, s \_\_\_\_\_ and water in order to grow.

Plants c \_\_\_\_\_ to ensure they have enough water, light and a s \_\_\_\_\_ of minerals.

## Learning Outcome 2

- Animals often compete with each other for food, mates and territory.

*Complete the sentences by using the words from the box below.*

mates    consumers    territory    food    photosynthesis

Animals are c \_\_\_\_\_ so they depend on the p \_\_\_\_\_ or other animals for f \_\_\_\_\_.

They compete for food, m \_\_\_\_\_ and their t \_\_\_\_\_.

## Learning Outcome 3

- Animals and plants may be adapted for survival in the conditions where they normally live.

**Animals and plants may be adapted for survival in arctic /dry environment**

*Complete the sentences by using the words from the box below.*

arctic    colour    desert    ears    feet    fur    heat  
hump    insulation    sand    snow    camouflage    area

**Polar bear:** It lives in the **a**\_\_\_\_\_.

**Features:**

A thick layer of **f**\_\_\_\_\_ for **i**\_\_\_\_\_

White fur to match the **s**\_\_\_\_\_ and act as **c**\_\_\_\_\_

Small **e**\_\_\_\_\_ to keep the surface **a**\_\_\_\_\_ small.

**Camel:** It lives in the **d**: \_\_\_\_\_ .

**Features:**

Large **f**\_\_\_\_\_ to spread the load on soft **s**\_\_\_\_\_ .

Fat is stored in the **h**\_\_\_\_\_.

Large surface area enables it to lose **h**\_\_\_\_\_ to the surroundings.

Sandy **c**\_\_\_\_\_ for camouflage.

**Animals and plants may be adapted for survival in arctic /dry environment**

*Choose the correct word from each pair in the sentences below.*

**Cacti:** They live in (**deserts / swamps**).

**Features:**

- Cactus plants have special features to reduce (**photosynthesis / transpiration**) to a minimum.
- The leaves are reduced to (**spines / cones**) and they can store water.
- They have a (**thin / thick**) waterproof cuticle to (**increase / reduce**) evaporation.
- The green succulent stems have (**few / many**) stomata.
- Cactus plants have (**deep / shallow**) roots to absorb water.

**Learning Outcome 4**

- Animals and plants are subjected to environmental changes.
- Such changes may be caused by living or non-living factors.

**Humans reduce the amount of land available for other plants and animals, eg building, quarrying, farming and dumping waste**

Waste may pollute **water with sewage, fertilisers or toxic chemicals**

Waste may pollute **air with smoke**, and gases such as **sulfur dioxide**, which contributes to **acid rain**

**Loss of land:**

As human population increases, less land is available to other species.

Match heads to tails.

Heads	Tails
Building	to keep up with food demands
Quarrying	landfill sites and waste sites
Agriculture	homes and factories
Treating/dumping waste	to obtain raw materials for industry

**Farming:**

*Complete the sentences by using the words from the box below.*

<b>bodies</b>	<b>chains</b>	<b>damage</b>	<b>destroys</b>	<b>expensive</b>	
<b>fertilisers</b>	<b>lakes</b>	<b>methods</b>	<b>polluted</b>	<b>slimy</b>	<b>wildlife</b>

Modern farming methods can **d**\_\_\_\_\_ the world we live in by making it **p**\_\_\_\_\_ .

Removal of hedges **d**\_\_\_\_\_ the natural habitat of many species of **w**\_\_\_\_\_ .

Careless use of **f**\_\_\_\_\_ pollutes rivers and **l**\_\_\_\_\_ making them green and **s**\_\_\_\_\_ .

Pesticides can get into food **c**\_\_\_\_\_ and eventually end up in our **b**\_\_\_\_\_ .

Modern farming methods can increase the yield.

Traditional 'organic' farming **m**\_\_\_\_\_ produce rather less food per acre and it's more **e**\_\_\_\_\_ .

# PHYSICS

## How Can You Light A Bulb?

We will use the PhET simulation called *Circuit Construction (DC only)* to start exploring circuits. You will require Java to run the following simulation on your computer.

Directions:

1. Log on to your computer
2. Go to the following website:

<https://phet.colorado.edu/en/simulations/category/physics>

3. Click on the application that says Circuit Construction Kit (DC only).
4. Click "Run now."

Your goals for this lesson:

1. Build some working circuits.
2. Describe how energy is transferred in circuits.
3. Tell about the properties of materials that conduct electricity.

### Directions

1. Drag wires, batteries, and bulbs into the box. Mess around for a few minutes. Try to build a circuit. You built a circuit if the light bulb glows. Move parts around to make your circuit work. If you start a fire, make a different circuit!

As you experiment, answer the questions on this page.

2. What happens when you right click on a piece?
- 

3. What happens when you right click on a red dot?
-



4. What happens when you right click on the words “split junction”?

---

5. What does “split junction” mean?

---

6. You will build a few circuits on the next page. You will sketch each circuit. Make a key in the space below to show how you will draw wires, batteries, and bulbs.

<b>Circuit and Parts to use</b>	<b>Draw the circuit diagram of your working circuit (Attach the screen shots of the circuits at the end of this assignment)</b>	<b>What did you see?</b>
<b>Circuit #1</b>  <b>2 wires</b> <b>1 light bulb</b> <b>1 battery</b>		

<p><b>Circuit #2</b></p> <p><b>3 wires</b></p> <p><b>1 light bulb</b></p> <p><b>2 batteries</b></p>		
<p><b>Circuit #3</b></p> <p><b>1 wire</b></p> <p><b>1 light bulb</b></p> <p><b>1 battery</b></p>		
<p><b>Circuit #4</b></p> <p><b>3 wires</b></p> <p><b>1 light bulb</b></p> <p><b>1 battery</b></p> <p><b>1 switch</b></p>		
<p><b>Make a new and different circuit for #5. List the parts, draw it, and tell what you saw.</b></p>		

<b>Circuit #5</b>		
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**7. What parts did every working circuit need?**

---

**8. What has to happen to get the light bulb to light up?**

---

**9. Where do the wires need to attach to the light bulb? What happens if the wires are not attached correctly?**

---

**10. What do you think the blue dots are in your circuits?**

---

**11. What forms of energy are transferred from battery to light bulb?**

---

---

**12. What does the switch do?**

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---

**Build a working circuit. Put a “Grab Bag” item in the circuit. Report your results below.**

<b>Item</b>	<b>What happens in the circuit</b>

**13. Describe the property or properties of the “Grab bag” items that made the light bulb light up.**

# FRENCH

1. Make a poster based on French culture.
2. Make a small chart on a A3 size sheet and can choose any of these three topics:
  - Draw body parts and label them in French
  - Draw different buildings and label them in French
  - Draw means of transports and label them in French.
  - Draw the objects (furniture) you find in your house and label them in French.
3. Revise the topics done in the class.

# GERMAN

1. Make a New Year Card in German. Lines should be written only in German

2. Deutschsprachige Länder : Essen, Marken und Feste

Make a Project in a file of about 10-15 Pages on A4 size coloured paper on German speaking regions i.e Germany, Austria, Switzerland. Make it colourful and creative using plenty of pictures. Write ups should be written in German.

The following points are:

Spezialitäten: food specialities of the countries e.g. Currywurst, black forest cake, German sausages  
Marken: well known brand names (trademarks) (what, where, when, how) e.g.

Adidas, Audi, BMW, Volkswagen, Nivea Feste: Celebrations or festivals of various regions e.g.

Weihnachten (Christmas) Ostern (easter) Silvester (New Year) Oktoberfest, Fasching (Carneval)

3. Make a PPT on Dachau Concentration Camp. It should contain 20 slides.

# SPANISH

1. Prepare a poster showing culture of Spain. Highlight about Spain and Spanish speaking countries with their capitals, their culture, tradition, cuisine etc. on a full size pastel sheet.
2. Revise the topics done till now ■



# MATHEMATICS

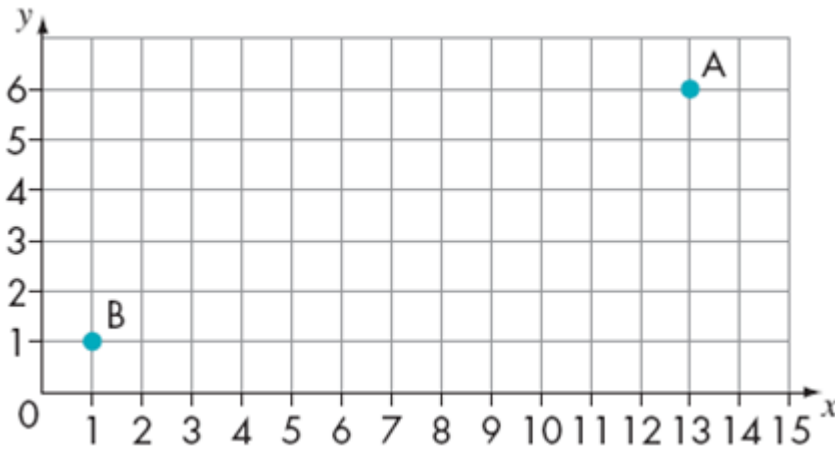
**NOTE:**

Ensure that the work is done on A4 size sheets and is in neat handwriting.  
**(Do not use your Maths. fair notebook for this assignment.)**

## Section A

1. On squared paper draw ten identical triangles. Cut them out carefully and try to arrange them so that they tessellate.
2. Create your own tessellating pattern.
3. In a class of 50 children, 26 are boys and the rest are girls.  
Find their respective percentages.
4. A football team won 40% of the total number of matches it played during 7 years.  
If it lost 12 matches in all and no match was drawn, find the total number of matches played by the team during the year?
5. A dealer buys a wrist watch for Rs. 225 and spends Rs.15 on its repairs. If he sells the same for Rs. 300, find his profit percent.
6. Find the interest to be paid at the end of 3 years if principal = RS 600 and Rate =10% p.a.
7. The population of a city is 550 000.  
It is expected that this population will increase by 42% by the year 2013.  
Calculate the expected population in 2013.
8. For each of the sequences given below,
  - (i) Write expression for the  $n^{\text{th}}$  term.
  - (ii) Using expression for  $n^{\text{th}}$  term, work out 30<sup>th</sup> term.
  - (a) 3,10,17,24...
  - (b) -2, 3,8,13...
  - (c) 0,4,8,16...
  - (d) 3,-1,-5,-9...

9. (i) How long is the line that joins the two coordinates A(13, 6) and B(1, 1)?  
 (Use Pythagoras rule and show all your working clearly)



10. Solve the following set of simultaneous equations:

$$3x + 2y = 22$$

$$x + y = 9$$

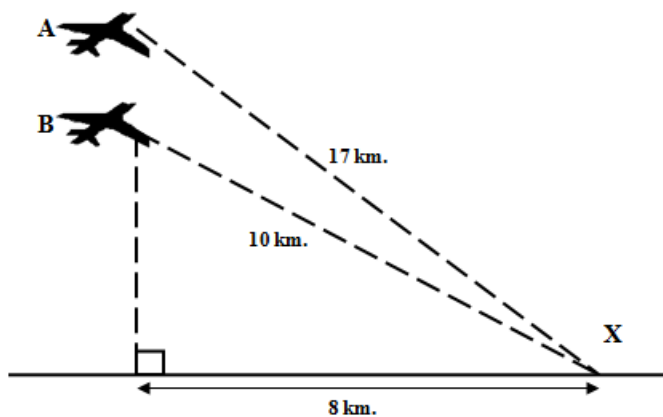
11. Solve the following inequalities:

(i)  $20 < 8n - 4 < 36$

(ii)  $1 \geq 3p + 10$

12. Two planes A and B are flying in formation. One plane is directly above the other. At a particular moment, there horizontal distance from a person standing at X is 8 km. At the same moment their true direct distance from X are 17 km and 10 km respectively.

(Use Pythagoras rule.)



- (i) Calculate the vertical height of Plane A.
- (ii) Calculate the vertical height of Plane B.
- (iii) Calculate the vertical height between the two Planes.

13. Simplify the following;

(i)  $(11^5)^2 \div (11)^2$

(ii)  $\frac{48x^2y}{3x}$

(iii)  $(2m^2n^5) \times (3mn^3)^2$

(iv)  $(a^6b^2)^2 \div (a^3b^2)^4$

14. Rearrange the formulae to make 'b' the subject:

(i)  $a = 2b - 7$       (ii)  $x = 2y + \frac{\square}{\square}$

15. Fred selected a sample of 10 students from his school and measured their ages and weights.

The results are shown in the table below:

Ages(years)	5	8	9	10	6	12	14	13	15	17
Weights(Kg )	18	25	30	28	20	33	38	35	37	39

In order to compare the two measures, he used a scatter diagram.

- (a) Draw the scatter diagram by plotting the given points.
- (b) Draw the line of best fit on the grid.
- (c) Use the line of best of fit to estimate the weight of a student with age 11 years.
- (d) Which one of the following words describes the correlation?

Positive

Negative

No

## **Section B**

### **Students need to prepare a beautiful and creative Math Dictionary which must include:**

- ✓ How to calculate interior angle of regular polygons
- ✓ Formula for exterior angle of polygon
- ✓ All angle properties(Sum of angles in triangle,quadrilateral,exterior angle property, isosceles triangle property ,angle in a semicircle etc)
- ✓ Profit/Profit%
- ✓ Loss/Loss%
- ✓ Simple Interest
- ✓  $n^{\text{th}}$  term of Arithmetic sequence formula
- ✓ Speed formula
- ✓ Pythagoras Rule
- ✓ Notes on rounding off to 1 dp ,2dp by giving examples
- ✓ Notes on rounding off to 1 sf ,2sf by giving examples
- ✓ Notes/Examples on factorization, Expanding brackets  $((x-2) (x+1))$ , changing the subject of a formula.
- ✓ Describing with examples tessellations
- ✓ Laws of Indices
- ✓ Conversions(length/mass/capacity/area/volume)

More topics can be added to it as per your curriculum or any other Math related.

This will help you revise topics later and will work as handy notes for the subject.

# VISUAL ARTS

**Create 2 Paintings Based on their study, skills and knowledge.**

**Minimum size A2**

# Global Perspective

The documents below consider the issue of access to the internet. Read them both in order to answer all the questions on the question paper.

Document 1: adapted from 'Should internet access be a basic human right?', an article by Ryan Moore published on the news website Examiner.com, in February 2011.

Since the beginning of world history, it has been a practice of corrupt leaders, governments, and powerful men of all types to keep control of the people by controlling the information they had. An educated and informed people can learn to work together to rid themselves of tyranny and oppression, as history has often shown.

Today, there is a new weapon available to the common people, a tool that can be used to access unimaginable amounts of information and spread it quickly amongst a population. This incredible piece of technology is commonly referred to as the internet. Now here is a question for you. Should access to the resources and information provided by the internet be a basic human right?

The internet not only helped the people of Egypt in 2011 to organize protests through social media networks such as Facebook, it also brought support from around the world. Before the internet, the story may have made the nightly news, viewed by a few million people. With the internet billions of people across the globe are watching.

The UN's Declaration of Human Rights has laid down what every human naturally has rights to. According to Article 1, "All human beings are born free and equal in dignity and rights." Article 26 states, "Everyone has a right to education. Education shall be free ...". Then Article 19 is "Everyone has the right to freedom of opinion and expression ..." and finally Article 27 adds "Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts, to share in scientific advancement and its benefits."

The internet is a global network of shared cultural life stored in bits of information on computers not owned by any one person or organization. It is a free resource with access to a multitude of educational materials. It is a forum for expression, ideas and opinions to share with the rest of the world. So, if we are all born equal, and are given the rights from this declaration of human rights, then the internet and access to it uncensored should be a basic human right.

There are many governments that keep their people in the dark, limiting and censoring what information they can access over the internet. Cuba and North Korea are examples of where these practices take place. Since the people don't have access to the same knowledge and information most of the rest of the world has, they are being denied some basic human rights.

The world is changing; technology is speeding up that change. The internet helps put power into the hands of every single person that has access to it, for once finally giving people the power over their own lives in a very raw democratic way. It has helped bring the world closer together, from Cincinnati to Cairo; it is the start of a true global society. To limit any one person or group from being able to participate in this new community is taking away one of their basic human rights.

Document 2: adapted from 'We owe the internet for changing the world. Now let's learn how to turn off', an article by Jonathan Freedland in *The Guardian*, a British newspaper, published in February 2011.

How is the internet changing the way you think in this globalised world?

Given the subject I thought it wise to engage in a little light crowd-sourcing, floating that question on Twitter. There are the idealists, grateful for a tool that has enabled them to think globally. They are now plugged into a range of sources, access to which would once have required effort, expense and long delays. It's not just faraway information that is within reach, but faraway people – activists are able to connect with like-minded allies on the other side of the world.

But there were laments as one respondent to my Twitter appeal put it: "Sadly I think less and Google more".

The biggest complaint was about the quality of thinking in the online era. What the internet has done, say the dissenters, is damage our ability to concentrate for sustained periods. Being connected meant being constantly tempted to look away, to hop from the text in front of you to another, newer one. One tweeter replied that he now thought "about more things for shorter amounts of time".

This, the worriers fear, is not just irritating; it might even damage our civilisation. How capable will people be of creating great works if they are constantly interrupted, even when alone? "What the net seems to be doing is chipping away my capacity for concentration and contemplation," angsts Nicholas Carr, who believes the internet is steering us toward "the shallows".

Now there are even devices available that limit internet access to prevent you getting too distracted. The writer Jay Rayner responded to my poll by confessing he'd recently rented a house with no internet connection to get some work done, adding that the internet "actively stops me thinking".

The impact of all this is not confined to the quality of intellectual inquiry. It's affecting family life, too. I recall the friend who saw a counsellor for advice about his disruptive children. Diagnosis: they were playing up to get attention from parents who had one eye forever on the BlackBerry. Some couples report tension, with one constantly tweeting while watching television or even during dinner. That's not so much a third person in the marriage as an entire crowd.

**It's not the internet itself that's doing this. It's the advent particularly of mobile technology, of the smartphone, turning the internet from an occasional, "opt-in" activity to what Rushkoff, an American theorist, calls an "always on" condition of my life". The internet is no longer just on your desk, but in your pocket, nagging you to stop what you're doing and pay attention.**

**We cannot turn back time. Nor, given the internet's power for good currently on display around the Middle East, should we want to. But we need to reassert control. We need, in short, to rediscover the off switch.**

**Read the documents in the accompanying Resource Booklet and answer all the questions.**

### **Access to the internet and Globalisation**

#### **1 Study Document 1.**

**(a) Identify two of the basic human rights mentioned by the author of Document 1.**

**(b) Identify two ways the author thinks that access to the internet meets basic human rights.**

**2 How convincing is the argument in Document 1 that internet access is a basic human right?**

**In your answer, you should evaluate the strengths and weaknesses of the argument.**

**3 Study Documents 1 and 2.**

**To what extent is the argument in Document 2 stronger than that in Document 1?**