

BAL BHARATI PUBLIC SCHOOL, Pitampura
HOLIDAYS HOMEWORK – (2009-2010)
CLASS - VIII

It's holiday time once again. We want you to enjoy your vacation so that in July you come back to school refreshed and rejuvenated. At the same time we want you to remain in touch with your studies. For this we have designed an interesting and activity based holiday homework, which if taken in the right spirit, will not be a burden but a pleasure to all of you. We wish you all the best and hope you enjoy yourself.

ENGLISH

Make a 4 page newspaper of your own on a pastel sheet folded into half. Give a suitable title of your own to it. All the articles included in the newspaper should be your own pieces of writing and must not be copied from anywhere.

The page wise specifications are as follows:

1. Page 1: Current Affairs (National & International News)
2. Page 2: Earth Watch (Articles related to environment and wildlife)
3. Page 3: Entertainment (Book reviews, crossword puzzles, jokes, riddles, sudoku and so on)
4. Page 4: Sports(Articles/ news reports related to the world of sports)

Note: Insert Illustrations along with your articles. (Wherever required)

HINDI

- प्र. 1. अनुच्छेद लिखिए:- (150 शब्दों में)
“मैं खुश हूँ क्योंकि मैं लड़की / लड़का हूँ.....”
- प्र. 2. कोई दस खास खबरों की अखबार में से कतरने चिपका कर उन पर अपने विचार लिखिए। (12 से 15 पंक्तियाँ)
- प्र. 3. स्वरचित कविता (किसी एक विषय)
 - टीम इंडिया
 - मैं हूँ एक पतंग
 - नेताजी बनाम चुनाव
 - उफ! ये टी० वी० सीरियल
 - बाल भारती : पच्चीस स्वर्णिम वर्ष
- प्र. 4. ‘सागरिका’ (सीनियर सेकेंडरी) के लिए मुख पृष्ठ बनाइए।
(मुख पृष्ठ हेतु ड्राइंग शीट का प्रयोग करें।)

SANSKRIT

नोट:- सारा कार्य संस्कृत कॉपी में कीजिए।

- प्र. 1. चित्रों को देखकर वस्तुओं के नाम मंजूषा में से देखकर लिखिए। (इस प्रश्न को हल करने से आप संस्कृत के नए शब्दों को जानेंगे।)

छुरिका, दूरभाषयन्त्रम्, शीतकम्, स्नानप्रकोष्ठः, शयनप्रकोष्ठः, दन्तलेपः,
फेनकम्, संगणकम्, पेषकम्, द्रोणी, शीततापनियन्त्रकयन्त्रम्, अध्ययनकक्षः



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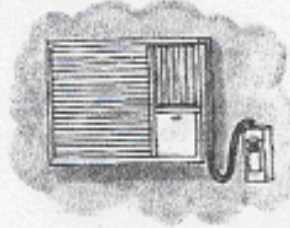
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प्र. 2. चित्र को देखकर मञ्जूषा की सहायता से वाक्य पूरे कीजिए।



सुन्दरम्, वनस्य, कच्छपः, सरोवरः, सिंहः, सरोवरे, वानरः, वकः, मत्स्यम्, मृगः

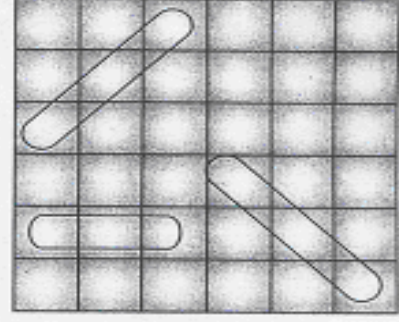
1. इदम् चित्रं अस्ति ।
2. वने एकः अस्ति ।
3. मत्स्याः तरन्ति ।
4. तटे एकः तिष्ठति ।
5. सः वकः खादति ।
6. तत्र अपि पादपस्य पृष्ठतः तिष्ठति ।
7. वृक्षे कूर्दति ।
8. वृक्षस्य समीपे अस्ति ।
9. सरोवरस्य तटे भ्रमति ।
10. इदम् चित्रम् अस्ति ।

प्र. 3. भारत सरकार के विभिन्न विभागों ने निम्नलिखित सूक्तियों को आदर्श वाक्यों के रूप में अपनाया है। सूक्ति तथा विभाग को मिलाइए।

सूक्तियाँ	विभाग
1. सत्यमेव जयते	भारतीय आयुर्विज्ञान संस्थान
2. अहर्निशं सेवामहे	दिल्ली नगर निगम
3. शं नो वरुणः	जलसेना
4. योगक्षेमं वहाम्यहम्	आकाशवाणी
5. नभः स्पृशं दीप्तम्	वायुसेना
6. तमसो मा ज्योतिर्गमय	जीवन बीमा निगम
7. बहुजनहिताय बहुजनसुखाय	स्थल सेना
8. शरीरमाद्यं खलु धर्मसाधनम्	परिवहन
9. सेवा अस्माकं धर्मः	डाक तार विभाग, भारत सरकार

प्र. 4. इस वर्गपहेली में क्त्वा, ल्यप~ एवं तुमुन~ प्रत्ययों से बने हुए शब्द छुपे हैं। प्रत्येक प्रत्यय के तीन-तीन शब्द हैं इन्हें ढूँढिए तथा लिखिए।

प	क	ख	च	छ	य	द्र	ष्टु	म्
र	ठि	ल	प	ठि	तु	म्	व	ह
त	थ	त्वा	व	ध	प	फ	ट	ठ
ग	घ	ङ्	क्री	ज	प्र	क	तुं	म्
ढ	ड	ण	त	डि	थ	व	ध	न
प्र	ण	म्य	उ	व	त्वा	म	य	र
ह	ज्ञ	प	क्ष	प	त	लि	च	म
ज	ग	अ	धि	कृ	त्य	र	खि	ल
म्य	झ	ड	ढ	ण	न	म	च	त्वा



प्र. 5. अंग्रेजी भाषा के शब्दों का संस्कृत भाषा के साथ गहरा संबंध है। अंग्रेजी भाषा के अनेक शब्द संस्कृत से ही लिए गए हैं। नीचे कुछ अंग्रेजी तथा संस्कृत भाषा के शब्द दिए जा रहे हैं, जो आपस में बहुत मिलते हैं। आप स्वयं उन्हें मिलाने का प्रयास कीजिए।

you	अस्मान~	ninety	त्रि
she	षष~	boat	देवता
They	पोत	brother	यूयम~
us	वयम~	centre	गौ
we	केन्द्र	character	सप्तति:
three	कफ:	cough	समिति
six	ते	cow	अशीति
sixtry	दुहितृ	cruel	भातृ
eighty	दन्त्य	daughter	चरित्र
dental	केन्द्र	deity	नवति:

MATHS

- Q.1. Write the squares and cubes of numbers from 1 to 100 observe the unit place of these numbers and write your conclusion.
- Q.2. Construct angles which are multiples of 15° i.e. $15^\circ, 30^\circ, 60^\circ, \dots, 150^\circ, 165^\circ, 180^\circ$. Name them properly. For example $\angle ABC = 60^\circ$
- Q.3. Do the following construction (using compass)
- Construct an angle equal to the given angle.
 - Construct the angle bisector of an acute angle and obtuse angle.
 - Construct a perpendicular bisector of a line segment.
 - Construct a perpendicular at a point given on a line segment.
 - Construct a perpendicular on the end points of a line segment. What conclusion or interpretation can you make from it?
 - Construct a perpendicular on a given line from the point outside it.
 - Draw a triangle say scalene triangle. Find the mid point of all its sides without using scale.
 - Given any three noncollinear points. Construct a circle passing through these non collinear points.

- i) Draw (all kinds) of triangles. Construct attitudes on all its sides. Write your attitudes on all its sides. Write your observations of isosceles or equilateral triangle. Some special observations will be there. Can you find it.
- j) Draw an obtuse angled triangle and construct its angle bisectors. Write your observation.
- k) For an obtuse angled triangle and scalene triangle ABC, construct an altitude and perpendicular bisector of side BC, obtuse angled at point B. Note down the difference between them.
- l) Can you divide a line segment into 2, 4, 6 or 8 equal parts using compass. Prove it, write the property you have used it.

Q.4. a) Do you know that:-

$$5 = \sqrt{5 \times 5} = \sqrt{5} \times \sqrt{5} = (\sqrt{5})^2$$

Write such observations for all prime numbers from 1 to 100.

b) We can write the $\sqrt{6} = \sqrt{2} \times \sqrt{3}$, $\sqrt{15} = \sqrt{5} \times \sqrt{3}$

Find out at least 50 such numbers which can be written in this form. (where 2, 3, 5 are prime)

c) We can write $\sqrt{8} = \sqrt{2 \times 2 \times 2} = 2\sqrt{2}$

Find out at least 20 such numbers which can be written in this form.

d) Verify the following statements with 5 different pairs (a, b) for each part.

i) $(a+b)^2 = a^2 + 2ab + b^2$

ii) $(a-b)^2 = a^2 - 2ab + b^2$

iii) $(a+b)(a-b) = a^2 - b^2$

e) You have learnt:-

i) $2 - (-3) = 2 + 3 = 5$

ii) $-2 - 3 = -(2+3) = -5$

iii) $-2 \times 3 = -(2 \times 3) = -6$

iv) $(-2)^2 = (-2) \times (-2) = 4$

v) $-3^2 = -(3 \times 3) = -9$

vi) $2 - 3 = -(3 - 2) = -1$

vii) $-2 + 3 = +(3 - 2) = 1$

viii) $(-3) \times (-3 + 5) = -3 \times (-3 + 5) = -3 \times (-3 + 5) = 9 - 15 = -6$

For each, write 10 examples.

f) You have learnt about special types of quadrilaterals – square, rectangle, rhombus and parallelogram. Write their definition and properties.

g) You know about Pythagoras theorem and pythagorean triplets, Find 25 pythagorean triplets using $(2m, m^2-1, m^2+1)$ where 'm' is any positive integer.

Q.5. Make a project on Surface Area and Volume of :-

i) Cuboid ii) Cube iii) Cylinder

Your project must include the following points:-

a) Concept

b) Formula (derivation)

c) Examples (mathematicals)

d) Real life examples

e) Well labelled diagrams

f) Nets of these 3 figures

PHYSICS

- Noise of a plane approaching at a speed of 1000m.p.h. is not heard. Do you know why?
- Archimedes was a great scientist and engineer of Greece. Once the king of his native city Syracuse asked him to determine the weight of his gold crown which was alloyed with some other cheaper metal (without damaging the crown). And the scientist made it possible. Can you think how it was possible? Explain the concept behind this phenomenon?

3. In olden days civilizations in South America used a lens to start a fire. What kind of a lens did they use and how did the fire start? Try the same technique to burn a paper yourself (in presence of parents).

CHEMISTRY

Q1. Cut pieces of fabric from old and discarded clothes. Categorize them as Nylon, Cotton, Polyester, Rayon, Silk, acrylic. Paste them in your scrap book (10 Samples). Write characteristic of Natural & Synthetic fibers.

Q2. State the differences between biodegradable and non biodegradable substances? Paste 5 samples of each kind of materials.

BIOLOGY

Prepare a newsletter using half cartridge sheet and provide the following information pagewise:-

Page 1: Provide information about Pandas: Habitat, food habits and reasons for their decreasing number.

Page2: On an outline map of India, mark the location of five national parks and five sanctuaries in India.

Page 3: Provide information about at least five species of animals, which are on the red list, along with their pictures.

Page4: Prepare a report in Project Tiger. Also paste relevant pictures.

SOCIAL SCIENCE

Travel brochures are more or less like other brochures but they contain **visuals of higher quality**, considering that they need to give the right feel and impact of the places they advertise and campaign for.

Travel brochure doubles as a **vacation guide** and is full of maps, pictures, of tourist spots, and information pertaining to the and marks and must visit places.

Information must also be provided about the **flora, fauna, climate, culture, history and geography** of the places mentioned in the brochure. An ideal travel brochure should also give information about flights, roads, the shortest way of reaching a particular place, and other such information. Apart from this, it should give detailed information about accommodation – a list of **hotels, motels, upper range hotels and mid range accommodation**.

Based on the following guidelines prepare a Travel Brochure for Switzerland

1. The project should begin with political map of Switzerland and an introduction of about 300 words.
2. It should include places worth visiting Switzerland. Along with all the important hotels, motels, restaurants, the brochure should also have a mention of the places where the tourist would like to go to shop.
3. For the convenience of the tourist, the Roadways and the Railways map should supplement your travel brochure.
4. Make your brochure attractive by pasting pictures of tourist destinations and important landmarks and giving a brief description of each.

COMPUTER SCIENCE

1. “Programs range from tiny scripts written by individual hobbyists to huge systems written by hundred of programmers.” Discuss what is Program in the above quote. How a Program is related to programming language? What are the different generations of programming languages?
2. Write in brief the Visual Basic Programming Languages? Comparison between Visual basic and Microsoft Visual Basic .NET in context of version, usage and tool box.

ART

1. Make a composition on ‘Summer Vacation’ size of the cartridge sheet (Half cartridge sheet) (Use all kinds of colours).