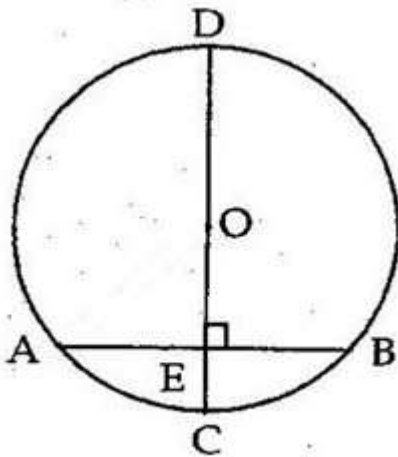


**WORKSHEET-50**  
**SUBJECT – MATHEMATICS**  
**CLASS – IX**  
**CHAPTER-10**  
**(CIRCLES)**  
**SESSION - (2020-21)**

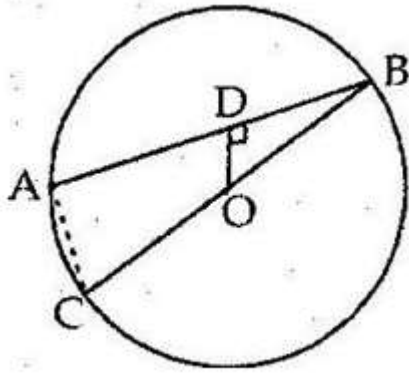
**Instructions to be followed: -**

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  - 3: - Read each and every topic (which will be given in worksheets) of the chapters from NCERT books.**
  - 4: - All the students must purchase NCERT books as it will help you to understand the chapter.**
  - 5: - If you have any query related to worksheet, ask your queries in WhatsApp group between 8:00 am to 3:00 pm.**
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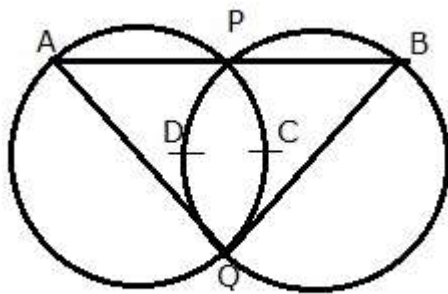
- 1.) A chord of length 16 cm is drawn in a circle of radius 10 cm. Find the distance of a chord from the centre of the circle.**
- 2.) In a circle of radius 5 cm, AB and CD are two parallel chords of lengths 8 cm and 6cm respectively. Calculate the distance between the chords if they are**
  - (i) On the same side of the centre**
  - (ii) On the opposite side of the centre.**
- 3.) In the below figure, the diameter CD of a circle with centre O is perpendicular to chord AB. If AB=12 cm and CE=3cm, calculate the radius of the circle.**



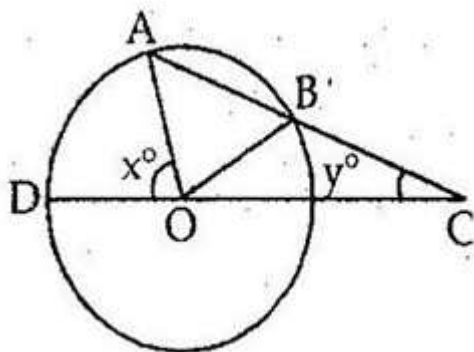
- 4.) In the below figure, OD is perpendicular to the chord AB of a circle with centre O. If BC is a diameter, show that  $AC \parallel DO$  and  $AC = 2(OD)$ .**



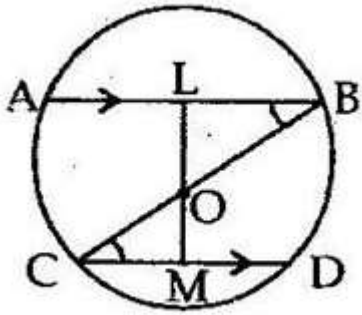
- 5.) Prove that the diameter of the circle perpendicular to one of the two parallel chords of a circle is perpendicular to the other and bisects it.
- 6.) Two circle of the radii 10 cm and 8 cm intersects each other , and the length of the common chord is 12 cm. Find the distance between their centres.
- 7.) Two equal circle intersects in P and Q. A straight line through P meets the circles in A and B. Prove that QA= QB.



- 8.) If a diameter of the circle bisects each of the two chords of a circle then prove that the chords are parallel.
- 9.) In the below figure , AB is a chord of a circle with centre O and AB is produced to C such that  $BC=OB$ . Also CO is a joined and produced to meet the circle in D. If angle  $ACD = y^\circ$  and angle  $AOD = x^\circ$ , prove that  $x=3y$ .



- 10.) In the below figure, BC is a diameter of a circle with circle with centre O. If AB and CD are two chords such that  $AB \parallel CD$ , prove that  $AB=CD$ .



For Solutions: <https://www.topperlearning.com/r-s-aggarwal-and-v-aggarwal-solutions/cbse-class-9-mathematics/r-s-aggarwal-and-v-aggarwal-mathematics-ix/circles>

**HARI VIDYA BHAWAN**  
**SUBJECT- SOCIAL SCIENCE**  
**CLASS – IX**  
**SESSION – 2020 – 21**  
**WORK SHEET - 50**

**Date –24-11-2020**

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**General Instructions: -**

- From now onwards students do your worksheet in your particular subject notebook respectively.
  - Don't use rough sheets, old copies or anything else. All the stationary shops have already. So, you can purchase it.
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  - Read each and every topic (which will be given in worksheets) of the chapters from NCERT books.
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- 

Chapter 4 Electoral Politics (civics)

Long Answer Questions:

1. Describe different stages of an election in India.
2. Describe the challenges to free and fair elections.
3. Describe the wide ranging powers of the Election Commission in India.
4. What are the main functions of the Election Commission of India.

# हरि विद्या भवन

## विषय - हिंदी

### सामान्य निर्देश

- \* प्रस्तुत कार्य अपनी हिंदी साहित्य की पुस्तिका में कीजिए। किसी अन्य पुस्तिका में किया गया कार्य स्वीकार नहीं किया जायेगा।
- \* सभी विद्यार्थियों को परीक्षा हेतु यह कार्य करना अनिवार्य है।
- \* वर्कशीट में दिए गए पाठ और कविता को ध्यानपूर्वक पढ़ें।
- \* वर्कशीट से सम्बंधित समस्या पूछने के लिए आप अपने कक्षा ग्रुप पर सुबह 8 बजे से 3 बजे तक मैसेज कर सकते।

हरि विद्या भवन

कक्षा - दसवीं

विषय - हिंदी

वर्कशीट - 53

दिनांक :- 24|11|20

पुस्तक :- संचयन

पाठ :- 3 टोपी शुक्ला

लेखक :- राही मासूम रज़ा

प्रस्तुत प्रश्नो के उत्तर दीजिए

प्र01) पाठ में टोपी ने कौन सी कसम खाई ?

प्र02) टोपी ने मुन्नी बाबू का कौन सच छिपाया था ?

प्र03) इफ़्फ़न टोपी की कहानी का महत्वपूर्ण कहानी का हिस्सा किस प्रकार से है ?

प्र04) अम्मी शब्द पर टोपी के घर वालो की क्या प्रतिक्रिया हुई ?

- प्र05) टोपी को इफ़न की दादी का व्यवहार क्यों अच्छा लगता था ?
- प्र06) इफ़न की दादी की मृत्यु के बाद टोपी का जीवन अकेला क्यों हो गया था ?
- प्र07) इफ़न की दादी का मायका का घर कस्टोडियन में क्यों चला गया था ?
- प्र08) प्रस्तुत के आधार पर इफ़न और टोपी का चरित्र चित्रण लिखिए ?
- प्र09) टोपी शुक्ला पाठ की कहानी अपने शब्दों में लिखिए ?

<https://youtu.be/A-XVcyb0AzE>

# HARI VIDYA BHAWAN

## Worksheet-53

### Class-X

### Subject-Science

### Session-2020-21

## Ch-5: Periodic classification of elements (Practice Questions)

**Date: 24/11/2020**

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### Instructions to be followed :-

- 1:- From now onwards students do your worksheet in your particular subject notebook respectively. Don't use rough sheets, old copies or anything else. All the stationary shops have already opened. So, you can purchase it.
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- 

### Multiple Choice Question:-

- Q.1 An element X has mass number 40 and contains 21 neutrons in its atom. To which group of the Periodic Table does it belong?
- (a) Group 1
  - (b) Group 4
  - (c) Group 2
  - (d) Group 3



Q.2 The elements A, B and C belong to groups 1, 14 and 17 respectively of the Periodic Table  
Which two elements will form ionic compounds?

- (a) A and B
- (b) A and C
- (c) B and C
- (d) None

Q.3 Upto which element, the Law of Octaves was found applicable?

- (a) Oxygen
- (b) Calcium
- (c) Cobalt
- (d) Potassium

Q.4 Element 'X' forms a chloride with the formula  $XCl_2$ , which is a solid with high melting point. X would most likely be in the same group of the periodic table as:

- (a) Si
- (b) Mg
- (c) Al
- (d) Na

Q.5 Which one of the following statements is not correct about the trends in the properties of the elements of a period on going from left to right?

- (a) The oxides become more acidic
- (b) The elements become less metallic
- (c) There is an increase in the number of valence electrons
- (d) The atoms lose their electrons more easily

### **Short Answer Type Question: -**

Q.6 Why are noble gases placed in a separate group?

Q.7 What are Metalloids?

Q.8 What is Newlands' Law of Octaves?

Q.9 (a) State Mendeleev's periodic law. Write two achievements of Mendeleev's periodic table

- (b) What were the two criteria used by Mendeleev in creating his Periodic Table?
- (c) Why did Mendeleev leave some gaps in his Periodic Table?

Q. 10 An element A is in group II (group 2) of the periodic table:

- (a) What will be the formula of its chloride?
- (b) What will be the formula of its oxide?

**Note –**

- This worksheet is for your self assessment. To solve the above questions read all the notes of chapter 5 and try to answer them.
- All the practice worksheets have to be done in same notebook wherever you are writing notes.