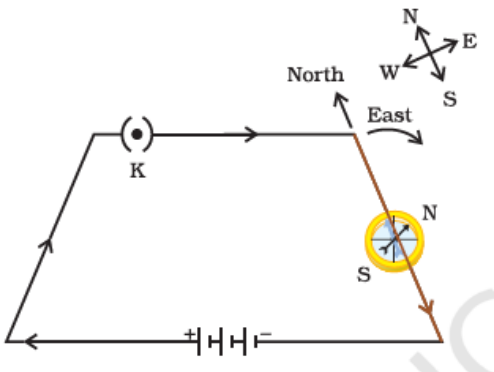


CLASS – X
SCIENCE
LESSON PLAN
CHAPTER – MAGNETIC EFFECTS OF ELECTRIC CURRENT

Sub-Topic	Magnetic Field due to a Current Carrying conductor
Duration	2 Periods (Approx. 40 minutes each)
PRE-REQUISITE KNOWLEDGE	Direction of Magnetic Field line is from north to south pole.
Learning Objective	Students will be able to draw pattern of magnetic field around a current carrying straight conductor, circular loop and solenoid and apply Right Hand Thumb rule to determine the direction of magnetic field.
Methodology	Strategies used – Flipped Learning and Inquiry-Based Learning Period : 1 (approx. 40 min) Activity : 15 min Facilitator will begin a class by connecting the following circuit (using connecting wires and a battery eliminator) in the class. Facilitator will bring magnetic needle close to the wire (Insulation may be removed from some portion of wire). Students will be allowed to observe the magnetic needle and write their observations in the following cases: - taking needle close and away from the wire. - keeping position of needle fixed and changing potential. - Changing the polarity of the battery in the circuit.  Questions are asked from the students based on their observations, which will lead them to realise that any current carrying conductor possesses magnetic field and understand the factors on which strength of magnetic field possessed by the current carrying conductor depends. This activity can arise students' interest in the topic and help them to retain concept for longer period. Discussion of Topic (10 min) – Statement and Application of right hand thumb rule. Readiness for next class: Flipped Learning (10 min) - Students will be instructed to explore the given topics at home using a variety of multimedia resources so that they can present the topic in the next period. Topics are: - The Magnetic field lines pattern around a straight current carrying conductor, circular loop and solenoid - Electromagnet,

	Period : 2 (approx. 40 mins) Students will review the content as a group and a member of each group will present the topic or subtopic in the class to show understanding of content under the guidance of teacher.
Learning Outcomes	Students will be able to: • Define electromagnet • State Right Hand Thumb Rule. • Understand that any current carrying conductor Posses Magnetic Field. • Draw magnetic field line pattern around a straight current carrying conductor, circular loop and solenoid. • Apply Right Hand Thumb Rule to determine the direction of magnetic field around a current carrying conductor. Knowledge and Understanding • Critical Thinking • Problem Solving • Collaboration Skills and Competencies
H.W. Assignment	1. Draw magnetic field lines pattern around a current carrying: 1) straight conductor 2) circular loop 3) solenoid., 2. Define electromagnet and write the factors on which the strength of electromagnet depends.