

## Period Plan-10

78

Nai-Talim → Experiential learning /  
Community Engagement

Name of the Faculty:- Firdous Fatima

Class:- IX

Subject:- Biology

Lesson Name:- Blood

Duration of the lesson:- 45 minutes → (2 period)

→ Concept(s) covered:-

→ Blood as connective tissue.

→ Blood components: RBC, WBC, platelets, plasma

→ Blood group types: A, B, AB, O

→ Rh factor: positive and negative

→ Importance of knowing blood group in emergencies.

→ Vocation(s) or occupation that can be connected to this lesson:-

→ Doctor / Pathologist

→ Lab Technician

→ Blood Bank Worker

→ Nurse

→ Health Educator

→ Medical Representative

→ Skills that can be inculcated:-

→ Scientific reasoning and inquiry

→ Health awareness

→ observation and analysis.

→ Hands-on lab practice

→ communication and reporting.

→ Interdisciplinary concepts that can be integrated:-

→ Biology - Blood composition and antigens.



- Chemistry - Reaction between antigens and antibodies
- Mathematics - Tabulation and percentage of blood types
- Health Education - Personal safety, emergency response
- Social Science - Role of blood donation in society

### → Learning Outcomes:-

Students will be able to -

- Identify and explain different blood groups and Rh factor.
- Understand safe blood transfusion practices
- Perform a blood group test
- Record and analyze group-wise data.
- Appreciate the value of health awareness and community service.

### → Tools/Materials Needed:-

- Blood typing kits (Antigen reagents A, B and Rh)
- Disposable lancets
- Sterile cotton and alcohol swabs
- Glass slides / test cards.
- Toothpicks / droppers
- Gloves and first aid box
- Consent letter from parents
- Record sheet

### → Steps:-

Pre-Activity

### → Teacher Briefing:-

- Explain what blood is, its groups, and Rh factor



- Explain safe methods for blood group testing
- Emphasize importance of hygiene and consent
- Divide class into 3 campus groups for testing (e.g., group A, B, C)
- Preparation:-
  - Send parental consent forms
  - Prepare materials and assign duties (recording, assisting, observing),
- Activity/Campus-Based Blood Group Testing:-
  - cleaning finger with alcohol swab.
  - Pricking with sterile lancet
  - placing drop of blood on test slide with A, B and Rh reagent.
  - Observing agglutination reaction
  - Interpreting blood group and recording.
- Post Activity:-
  - Data Analysis:-
    - \* Tally blood groups by type (A, B, AB, O) and Rh(+/-)
    - \* Create bar graphs or pie charts of pie chart distribution.
    - \* Discuss common and rare groups
    - \* encourage students to note their group for medical ID.
  - Discussion questions:-
    - Why is blood group testing important in emergencies?
    - Which group is universal donor? Universal recipients
    - Can this activity help during disaster and

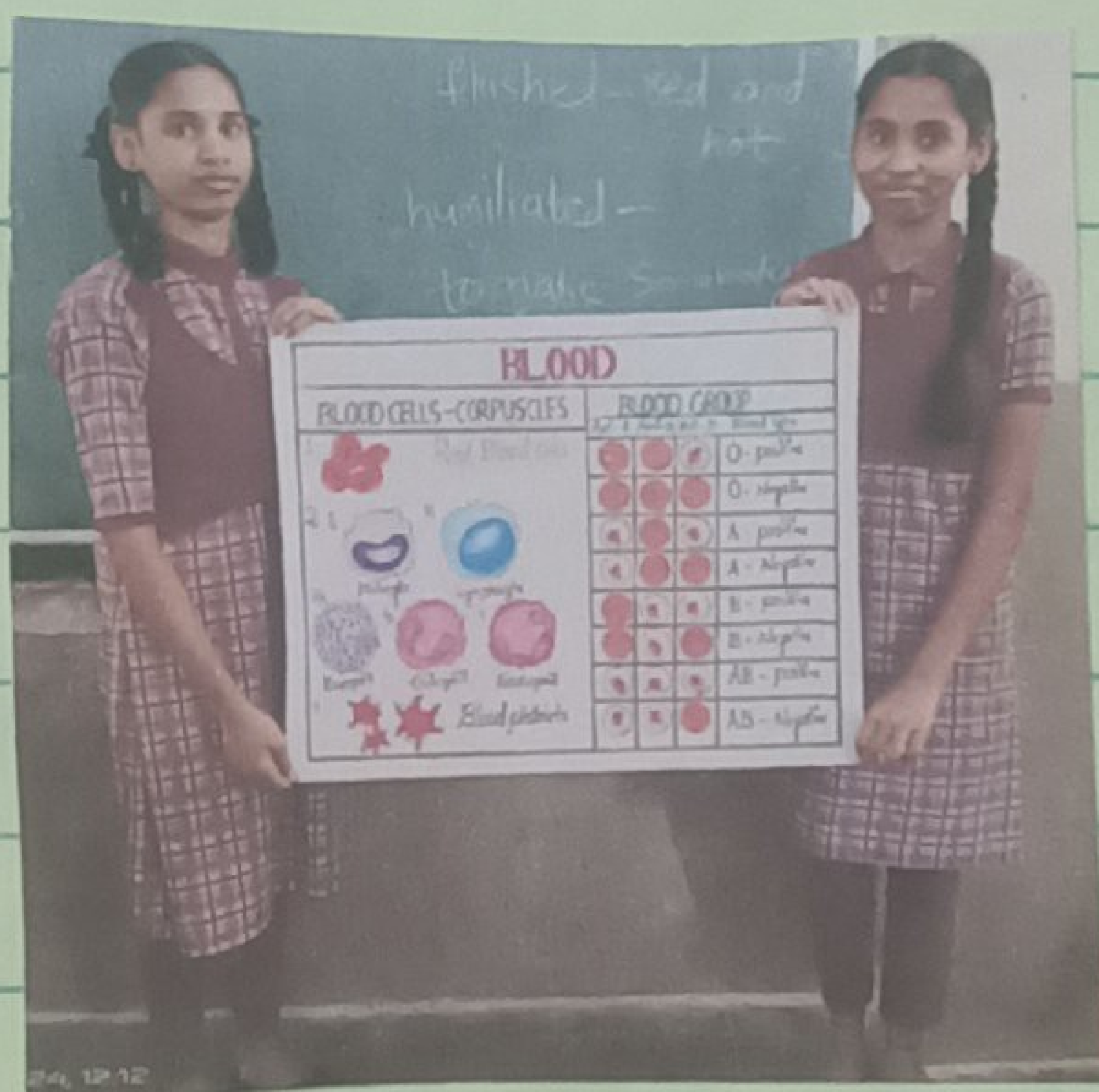


accident response.

→ precautions:-

- \* Use only sterile and disposable materials
- \* Wear gloves and dispose of sharps properly.
- \* No forceful testing, only voluntary with consent.
- \* Have a first aid kit and trained adult present.
- \* Maintain confidentiality and student dignity.

Create portfolio that can be assessed:-



- Assessment of students: students will be assessed on
- Participation in activity
  - Accuracy in recording and reporting data
  - worksheet on blood group identification
  - oral questions during reflection discussion.
  - Peer assessment on group work and hygiene maintenance.

Reference:-

- Telangana State 9th Biology, textbook
- [www.frontiers.org](http://www.frontiers.org).





### Blood Group Camping.

