

GROUP: _____

NAMES: _____

DATE: _____

DSA
Alternate Base Systems
for Cross-Curricular Fun & Engineering Applications

GROUPWORK FORM

In your group please follow the instructions below.

1. Everybody draw your symbols for Dec and El below. Put a circle around your two symbols and label the circle with your initials.

2. Each person explains in words out loud what each symbol represents and justifies why s/he chose those specific shapes.

3. After everyone has spoken the group votes on each of the symbols. People can vote for more than one symbol. Write the votes each symbol gets inside of the circle. The symbol most people vote for is your group's choice.

If two symbols tie or people cannot decide, try to either compromise or design new symbols as a group. Incorporate elements of the top symbols into the symbols developed by the group.

4. Write the winning symbols below and use the extra sheet of paper to draw them so LARGE that each takes up half the page.

DEC: _____

EL: _____

GROUP: _____

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5. Discuss and come up with real-world applications for the Dozenal System. List or make a map of your ideas for applications below.

6. Assign roles for who will do what when you present your choices to the class:

A. _____ will hold and make sure everyone in the room can see the symbols we chose.

B. _____ will explain how to draw the symbols.

C. _____ will justify and give reasons to convince other students that these symbols should be chosen by the class.

D. _____ will provide applications for how the Dozenal system could be used in real-life situations instead of the Decimal system.

7. Conclusion: Were our group's designs chosen? YES NO

8. Reflection: How did this activity help your group to understand the process of Engineering design? Discuss then collaboratively write your answer to the question in the space below.