

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

DSA

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

### HANDOUT FOR INDIVIDUAL WORK Level 2 – Counting, Grouping, Sets, Numbers

On this paper please write as many numbers as you can fit on the paper in base-10  
AND

Please put a plain pencil circle (or whatever shape) around each set of 10 numbers.

THEN PUT A COLORED CIRCLE AROUND EVERY 12 NUMBERS, whatever they are.

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Think about the Dozenal-base system:

One, two, three, four, five, six, seven, eight, nine, dec, el, ten.

Notice that in order to count up to 10 in dozenals, we must include two extra numbers, Dec and El. Mathematicians have agreed to call the two extra Dozenal numbers Dec and El.

Nobody has ever decided which symbols we should use for Dec and El. Maybe you can help.

Below, please make up your own shapes for the two extra Dozenal numbers, Dec and El.

Draw them next to their names: DEC and EL and circle your best efforts for each number.

DEC

EL