

CREATE A CREST

QUIMPLES SEASON IS ALMOST HERE! AS A STUDENT FROM HOGWARTS, YOU ARE IMPLORING TO DESIGN A UNIQUE PATTERN TO SERVE AS THE CREST ON YOUR HOUSE BANNER. BANNERS ARE UNFURLED AT THE QUIMPLES CHAMPIONSHIPS.

PROFESSOR R. INTERVAL'S REQUIREMENT IS TO INCLUDE EACH OF THE SHAPES IN THE SET OF EITHER MAGIC PATTERN BLOCKS OR MAGIC PENTABLOCKS. HOWEVER, THERE CAN BE NO MORE THAN 6 OF ANY ONE OF THE DIFFERENT SHAPES.

TO SYMBOLIZE UNITY AND TEAMWORK YOUR DESIGNS MUST HAVE ONLY *ROTATIONAL SYMMETRY* WITH NO LINE SYMMETRY.

YOUR FIRST TASK IS TO CREATE A UNIQUE INDIVIDUAL DESIGN. ONCE YOU ARE SATISFIED WITH YOUR DESIGN, RECORD A DETAILED BLUEPRINT THAT INCLUDES EXACT MEASUREMENTS OF THE LENGTHS, ANGLES AND PROPER GEOMETRIC NAMES OF EACH PIECE IN YOUR DESIGN. ALSO, TRY TO DETERMINE THE DIMENSIONS AND PERIMETER OF YOUR ENTIRE DESIGN.

REMEMBER, THOUGH YOUR DESIGNS ARE INDIVIDUAL, YOU SHOULD SHARE YOUR DISCOVERIES AND IDEAS WITH YOUR HOUSEMATES. TEAMWORK FOR THE GREATER GOOD ALWAYS RESULTS IN HOUSE POINTS.

A NOTE ABOUT MEASUREMENT: YOU MIGHT THINK YOU NEED A TOOL TO MEASURE. THE MAGIC OF THE ACADEMY IS AGAIN IN FULL EFFECT AND THE MAGIC IS IN THE BLOCKS. EXPLORE THE BLOCKS! REMEMBER P. FIBONACCI'S DECREE, "MAGIC IS BASED ON RELATIONSHIPS AND SUBTLETIES OF SHAPE, NUMBER AND PATTERNS."

*IF YOU FIND YOURSELF IN NEED OF MORE CLUES, THE SORTING HAT MAY BE ABLE TO OFFER SOME ASSISTANCE.



NOW THAT EACH OF YOUR GROUP MEMBERS CREATED A BLUEPRINT FOR THE HOUSE BANNER IT IS TIME TO CHOOSE WHICH ONE WILL BE ENLARGED TO BANNER SIZE.

MAGIC IS IN THE AIR AGAIN AND
THE MAGIC NUMBER IS SEVEN!

EACH GROUP WILL BE MAKING A DESIGN THAT IS **SEVEN TIMES** LARGER THAN THE ORIGINAL PLAN. YOUR SMALL INDIVIDUAL DESIGNS WILL ALSO BE MOUNTED ON THE BANNER AROUND THE DESIGN YOU HAVE CHOSEN TO ENLARGE, SYMBOLIZING THE INDIVIDUALITY THAT MAKES A COHESIVE HOUSE.

YOUR GROUP TASK IS TO MAKE ENLARGEMENTS OF ALL OF THE PATTERN BLOCK SHAPES THAT YOU WILL NEED TO RECREATE THE DESIGN ON A LARGER SCALE. YOU WILL NEED TO MEASURE THE ANGLES AND DRAW THE LENGTHS OF THE SIDES (SEVEN TIMES THE ORIGINAL) SO THAT ALL OF THE LARGE PATTERN BLOCKS WILL FIT TIGHTLY TOGETHER. THE SHAPES CAN BE DRAWN ON THE STANDARD PATTERN BLOCK COLORS OR DIFFERENT COLORS OF YOUR GROUPS' CHOOSING. MOUNT YOUR ENLARGED PIECES AND INDIVIDUAL DESIGN PLANS TOGETHER TO PRODUCE YOUR HOUSE QWIMPLER BANNER.

LET THE GAMES BEGIN!