COMPUTATIONAL THINKING

HUMAN “GUESS WHO”

PARTICIPANTS: WHOLE CLASS

SUPPLIES: 1 A4 PAPER, PENCIL AND NO-TIPS SCISSORS

HOW TO PLAY:

- WRITE ALL CLASS STUDENT’S NAMES AND CUT THEM INTO STRIPS;
- AKS A STUDENT TO SORT A NAME;
- CHOOSE ANOTHER STUDENT TO TRY TO IDENTIFY WHO WAS DRAWN;
- THE REMAINDER OF THE CLASS SHOULD TRY TO IDENTIFY THE LUCKY PARTY BY ASKING QUESTIONS TO ELIMINATE POSSIBILITIES: EX: DOES THEY HAVE HAIR? IT'S A BOY?;
- THE QUESTS CAN ONLY BE ANSWERED WITH “YES” OR “NO”;
- THE STUDENT WHO ANSWERS THE QUESTIONS MARKS THE NUMBER OF QUESTIONS ASKED;
- WHEN THE QUESTIONER IDENTIFIES WHO THE LUCKY CHILD WAS,

THE STUDENT WHO ANSWERED THE QUESTIONS MUST INFORM HOW MANY QUESTIONS WERE NECESSARY TO GET THE ANSWER;

THE PURPOSE OF THIS ACTIVITY IS TO ASK GOOD QUESTIONS, TO GET THE ANSWER WITH THE MINIMUM OF QUESTIONS

LET'S TALK ABOUT WHAT WE DID? AFTER PLAYING, TALK TO STUDENTS ABOUT THE PILLARS OF COMPUTATIONAL THINKING INVOLVED IN THE ACTIVITY:

- WHEN THE QUESTIONER IS TRYING TO FIND OUT WHO THE LUCKY CHILD WAS, WITH EACH QUESTION HE FILTERS THE INFORMATION, WHICH ALLOWS HIM TO FOCUS ONLY ON THE ESSENTIAL CHARACTERISTICS TO FIND OUT WHO THE LUCKY CHILD WAS. IN THIS CASE, THE PILLAR USED IS ABSTRACTION, SINCE INFORMATION THAT IS NOT ESSENTIAL TO RESOLVE THE PROBLEM IS IGNORED.]

- EACH QUESTION ASKED WAS HELPING TO FORM THE ANSWER, IN THIS CASE, THE PILLAR USED IS DECOMPOSITION, AS WE DIVIDE THE RESULT INTO SMALLER PARTS.

- WHEN A CHILD ASKS GOOD QUESTIONS AND AS A CONSEQUENCE ELIMINATES A LARGE NUMBER OF ANSWER OPTIONS, A VERY GOOD REFERENCE PATTERN IS CREATED, WHICH CAN BE USED BY OTHER COLLEAGUES. BY DOING THIS, STUDENTS ARE USING THE PATTERN RECOGNITION PILLAR.