

USING PUNNETT SQUARES



CAN YOU HELP
US SOLVE PROBLEMS
LIKE IN THE STORY?

LET'S LEARN
HOW TO USE
PUNNETT SQUARES!



IN THE STORY, WE SHOW HOW A PUNNETT SQUARE CAN BE USED TO CALCULATE THE LIKELIHOOD THAT A SUPER-STRONG PERSON LIKE WONDERGUY COULD BE BORN FROM TWO PARENTS, EACH WITH A RECESSIVE STRENGTH GENE. LET'S LOOK AT DIFFERENT SCENARIOS. REMEMBER HOW DOMINANT AND RECESSIVE TRAITS WORK:

TT	SHOWS DOMINANT TRAIT
Tt	SHOWS DOMINANT TRAIT
tt	SHOWS RECESSIVE TRAIT

1) SUPPOSE ONE PARENT IS SUPER-STRONG (tt) AND THE OTHER DOES NOT CARRY THE RECESSIVE GENE (TT).

THE PROBABILITY THAT THEIR OFFSPRING HAS SUPER-STRENGTH IS _____.

2) SUPPOSE ONE PARENT IS SUPER-STRONG (tt) AND THE OTHER DOES CARRY THE RECESSIVE GENE (Tt).

THE PROBABILITY THAT THEIR OFFSPRING HAS SUPER-STRENGTH IS _____.

3) SUPPOSE ONE PARENT CARRIES THE RECESSIVE GENE (Tt) AND THE OTHER DOES NOT (TT).

THE PROBABILITY THAT THEIR OFFSPRING HAS SUPER-STRENGTH IS _____.

SUPER-TRICKY! IN EACH CASE ABOVE, WHAT IS THE PROBABILITY THAT THEIR OFFSPRING DOES NOT HAVE SUPER-STRENGTH? IN EACH CASE, DO YOU NOTICE ANYTHING ABOUT THE SUM OF THE PROBABILITIES?