Read about the Smith Family and their inherited trait of *dimples*

1. Grandfather and Grandmother Smith smiled a lot and showed off their dimples each time. They had a son named John, who had dimples, and daughter named Julie, who did not. Julie died at an early age.
2. John Smith met and married Mary Jones because she had the most beautiful dimples when she smiled. They had 4 children, 1 boy and 3 girls. Their son, Tom, had dimples, and two of the girls, Judy and Kay, had dimpled smiles. Their sister June lacked dimples.
3. After college, Tom met and married Jane Kennedy who also had dimples. They had 3 children, Brittany, Julie and Amanda who shared their parent’s dimpled smile.
4. Tom’s sister Kay married a lawyer named James who seldom smiled and didn’t have dimples. Their only son Matthew was like his mother when he smiled. Judy never married.
5. Tom’s sister, June, married a doctor and had 5 children. Three of the children were boys, Jay, Fred, and Mike. Mike and Fred had dimples like dad, but Jay’s smile was like his mom’s lacking dimples. One sister, Susan, had dimples, but the other, Katherine, didn’t.
6. After reading the passage, construct a pedigree showing all family members in each generation that do and do NOT have dimples. Use letter ”d” for genotypes. Dimples are dominant, shade for the recessive variation. Leave space below each shape to write the genotype.
7. Once the pedigree is constructed, write the correct genotype by each person in the family. Leave a question mark for any uncertain allele.