Pi Mu Epsilon Problem of the Month
September 2019

Four six-sided dice contain a different letter from A-Z on each of their 24 sides. The following words produce the associated outcomes. An outcome of, for example, 2 1 1 means that two of the four letters in the word are on the same die, a third letter is on a second die, and a fourth letter is on a third die. Using the words below, determine the letters on each of the four dice.

BIRD	1 1 1 1	MEAT	1 1 1 1
CHOP	2 1 1	BURN	2 1 1
LEAF	1 1 1	QUIZ	2 2
JUNK	1 1 1 1	BORE	2 1 1
ROPE	2 1 1	ONYX	2 2
WIGS	2 1 1	BOAR	2 2
RIOT	2 2	ZIPS	2 2
BUST	2 1 1	NOSE	2 1 1
SPIT	3 1	PUNT	2 1 1
PINK	2 1 1	ROSY	2 1 1
HAND	2 2	FROG	3 1

Problem of the Month Rules:
⌘ Submissions must include a complete mathematical justification along with the answer.
⌘ Submissions may only be made by individuals or groups of two and must be dated.
⌘ Due date: September 27, 2019 before 5 p.m.; they may be given to Dr. Phillip Poplin or Dr. David Shoenthal.

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