Name _____

5-6B Lesson Master

Questions on SPUR Objectives
See pages 320–323 for objectives.

USES Objective H

A pond is stocked with 200 bass, 150 perch, and 175 bluegills.

1. What is the probability that a fisherman will catch a bluegill? _____

2. What is the probability that the fisherman will catch a perch or a bluegill? _____

Pinochle is a card game using 2 decks that consists of twelve cards in each of four suits—spades, hearts, diamonds, and clubs. There are two of each ace, king, queen, jack, 10, and 9 in each suit. All cards must be dealt to play the game. The king, queen, and jack are "face" cards.

3. What is the probability of being dealt a 10? _____

4. What is the probability of being dealt a red face card such as the queen of diamonds? _____

5. What are the odds of being dealt a king? _____

A small box contains 30 pieces of paper, 5 of which have a star drawn on them. If students choose a paper with a star, they will receive extra credit. Jude chooses one piece of paper.

6. What is the probability that Jude will earn extra credit? _____

7. What are the odds that Jude will not receive extra credit? _____

Each crate that is delivered to the fresh market has 10 bruised peaches. The market receives 6 crates that contain 150 peaches each. Suppose you choose a peach at random.

8. What is the probability that the peach you chose will be bruised? _____

9. What are the odds that the peach you chose will not be bruised? _____

10. Are the values in 8 and 9 complements of each other? Explain. _____

In 11–15, use the following information. A board game has players choose letter tiles to create words. Each letter is worth a given number of points. There may be several tiles for a given letter.

2 blanks worth 0 points	10 consonants worth 4 points
26 consonants worth 1 point	1 consonant worth 5 points
7 consonants worth 2 points	2 consonants worth 8 points
8 consonants worth 3 points	2 consonants worth 10 points
42 vowels worth 1 point	

Let w = points the tile is worth.

11. What is $P(w = 1)$? _____

12. What is $P(w \leq 3)$? _____

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13. What is $P(w > 4$ and is a consonant)? _____

14. What is $P(w = 10$ and is a consonant)? _____

15. What are the odds of choosing a consonant that is worth between 3 and 8 points? _____

16. Five fair standard dice are used to play a game. Four of the dice roll a 6. What are the odds that the last die you roll will be a 6? _____

17. Two fair standard dice are rolled. What is the probability that their sum will be less than 5? _____

A survey was conducted of 32 girls and 32 boys. No student plays more than one instrument.

Instrument played	Girls	Boys
Piano	16	4
Percussion	4	6
Woodwind	6	4
No Instrument	6	18

18. What is the probability that a student chosen at random plays the piano? _____

19. What is the relative frequency of boys to girls who play a percussion instrument? _____

20. What is the relative frequency of girls who play the piano or a woodwind instrument to the total girls? _____

21. If these students can be used to represent a student population of 352, then how many boys would you expect to play the piano? _____