

MATH GAMES

using dice and cards

JORDAN ELEMENTARY SCHOOL

Kindergarten

DICE

*ROLL a DIE AND WRITE THE NUMBER THE DOTS REPRESENT. WHEN READY, ROLL 2 DICE AND WRITE THE NUMBER THE DOTS REPRESENT.

*ROLL a DIE, WRITE THE NUMBER IT REPRESENTS, THEN WRITE THE 2 NUMBERS THAT COME AFTER IT.

*ROLL a DIE, WRITE THE NUMBER IT REPRESENTS, THEN WRITE THE 2 NUMBERS THAT COME BEFORE IT.

CARDS (Take out the face cards and jokers)

*PLAY a GAME OF WAR WHERE THE BIGGEST NUMBER WINS.

*PLAY a GAME OF WAR WHERE THE SMALLEST NUMBER WINS.

*PICK JUST a SINGLE SUIT (FOR EXAMPLE: HEARTS) PUT THE CARDS IN ORDER FROM SMALLEST TO LARGEST.

*PICK JUST a SINGLE SUIT (FOR EXAMPLE : HEARTS) PUT THE CARDS IN ORDER FROM LARGEST TO SMALLEST.

*PLAY GO FISH. MATCHES ARE CARDS OF THE SAME VALUE.

*PLAY WITH RED OR BLACK SUITES. PLAY a GAME OF CONCENTRATION MATCHING CARDS WITH THE SAME NUMBER.

*JUMPING JACKS ~ PUT THE JACKS BACK INTO YOUR DECK AND PLACE ALL CARDS IN a BOWL/BAG. TAKE TURNS DRAWING CARDS AND SAYING THE NUMBER CORRECTLY. IF CORRECT KEEP THE CARD. CONTINUE PLAYING UNTIL SOMEONE DRAWS a JACK. WHEN a JACK IS DRAWN, THAT PLAYER MUST PUT ALL OF THEIR CARDS BACK IN THE BOWL/BAG. THE WINNER IS THE PLAYER WITH THE MOST CARDS WHEN YOU CHOOSE TO END THE GAME.

*JUMPING JACKS variations ~ Draw a card and say the number that is ONE MORE OR ONE LESS.

1ST GRADE

DICE

- *ROLL 2 DICE, ADD UP THE NUMBERS AND WRITE DOWN THE SUM.
- *ROLL A DIE AND TELL IF THE NUMBER IS ODD OR EVEN.
- *ROLL 2 DICE, AND TELL IF THE FIRST NUMBER ROLLED IS GREATER THAN, LESS THAN, OR EQUAL TO THE OTHER DIE.
- *ROLL 3 DICE AND PUT IN ORDER FROM LEAST TO GREATEST.

CARDS

- *SPLIT DECK OF CARD INTO 2. EACH PERSON FLIPS OVER TWO CARDS AND ADDS THEM TOGETHER. THE PERSON WITH THE HIGHEST SUM WINS ALL 4 CARDS. IF THE SUM IS EQUAL, PLACE THEM IN THE CENTER PILE AND THE NEXT HAND WITH THE HIGHEST SUM WINS ALL THE CARDS. (FACE CARDS ARE WORTH 10, ACES CAN BE WORTH 1 OR 11).
- *DEAL OUT 12 CARDS FACE UP. PLAYERS TAKE TURNS FINDING AND REMOVING COMBINATIONS OF CARDS THAT ADD UP TO 10. WHEN NO MORE COMBINATION TO 10 CAN BE MADE, DEAL NEXT 12 CARDS AND CONTINUE.
- *PLACE AN ODD NUMBERED CARD AND AN EVEN NUMBERED CARD FACE UP IN CENTER OF TABLE. SPLIT THE REST OF THE DECK INTO TWO PILES. TAKE TURNS PLACING CARDS ON ODD/EVEN PILES. FIRST PLAYER TO GET RID OF ALL THEIR CARDS WINS.
- *PLAY A VARIATION OF WAR BY HAVING EACH PLAYER KEEP A 10 OUT AT ALL TIMES IN FRONT OF THEM FLIPPED UP, THEN FLIP FROM THE FACE DOWN PILE AND MAKE A TEEN NUMBER. COMPARE THE TEEN NUMBERS AND WHOEVER HAS THE LARGEST TAKES BOTH CARDS THAT WERE FLIPPED ~ ALWAYS KEEP A 10 IN FRONT OF EACH PLAYER.
- *THREE PLAYERS ARE NEEDED FOR THIS GAME. ONE IS THE LEADER AND THE OTHER 2 ARE THE 'MIND READERS'. 2 PLAYERS DRAW A CARD WITHOUT LOOKING AT THEIR OWN CARD AND PLACE IT IN FRONT OF THEIR FOREHEAD. THE LEADERS SAY THE SUM OF THE 2 CARDS AND EACH 'MIND READER' MUST FIGURE OUT WHAT THEIR CARD IS.

2nd grade

Dice

- *PLAY WITH 2 DICE, ROLL THEM, ASSIGN ONE AS THE TENS PLACE VALUE AND THE OTHER AS THE ONES PLACE VALUE, SEE WHO CAN BUILD THE BIGGEST NUMBER.
- *PLAY SAME AS ABOVE, BUT HAVE STUDENT SAY THE NUMBER THAT IS ONE MORE. (10 more)
- *PLAY SAME AS ABOVE, BUT HAVE STUDENT SAY THE NUMBER THAT IS ONE LESS. (10 less)
- *TAKE TURNS ROLLING DICE (2 OR 3) AND ADDING ALL CUBES, WHOEVER HAS THE LARGEST NUMBER WINS A POINT FOR THAT ROUND. PLAY 10 ROUNDS.
- *ROLL THE 2 DICE, LATER IN THE YEAR 3, AND ASSIGN EACH DIE A PLACE VALUE. REPRESENT THE NUMBER USING WORDS, PLACE VALUE BLOCK DRAWINGS, EXPANDED FORM, ETC

cards

- *PYRAMID MAKE 10 ~ USE ACES THROUGH 10, KINGS ALSO. SHUFFLE THE CARDS. TAKE A CARD, DO NOT LOOK AT IT AND SET IT ASIDE ~ THIS WILL BE YOUR MYSTERY CARD. PLACE CARDS IN A PYRAMID SHAPE FACE UP (5, 4, 3, 2, 1). STUDENTS CHOOSE 2 CARDS THAT TOGETHER MAKE 10 AND REMOVE THEM FROM THE PYRAMID. REPLACE THOSE SPOTS. CONTINUE TO FIND PARTNERS TO 10. WHEN ONE CARD IS LEFT, NOW IS THE TIME TO MAKE A PREDICTION ~ WHAT NUMBER IS YOUR MYSTERY CARD? CHECK YOUR MYSTERY CARD TO SEE IF CORRECT.
- *PLAY GO FISH USING SAME CARDS AS ABOVE, BUT RATHER THAN SEARCHING FOR PAIRS, ASK FOR THE PARTNER THAT WOULD GIVE YOU A TOTAL OF 10. PAIRS ARE THOSE NUMBERS THAT ADD UP TO 10.
- *PLAY CONCENTRATION WITH THE SAME CARDS AS ABOVE. MATCHES ARE NUMBERS THAT ADD UP TO 10.
- *SPLIT DECK OF CARD INTO 2. EACH PERSON FLIPS OVER TWO CARDS AND ADDS THEM TOGETHER. THE PERSON WITH THE HIGHEST SUM WINS ALL 4 CARDS. IF THE SUM IS EQUAL, PLACE THEM IN THE CENTER PILE AND THE NEXT HAND WITH THE HIGHEST SUM WINS ALL THE CARDS. (FACE CARDS ARE WORTH 10, ACES CAN BE WORTH 1 OR 11).

3rd grade

DICE

- *ROLL ALL 3 DICE AND ADD, WHOEVER HAS THE HIGHEST TOTAL WINS A POINT FOR THAT ROUND.
- *ROLL ALL 3 DICE, TRY TO BUILD THE LARGEST OR SMALLEST NUMBER POSSIBLE BY ASSIGNING PLACE VALUES - HUNDREDS, TENS, AND ONES TO THE DICE.
- *BUILD A NUMBER USING HUNDREDS, TENS, ONES - WRITE IT OUT. NOW WRITE THE NUMBER ONE MORE, ONE LESS, TEN MORE, TEN LESS, ONE HUNDRED MORE, ONE HUNDRED LESS.
- *BUILD A NUMBER USING HUNDREDS, TENS, ONES - WHAT OTHER WAYS CAN YOU MAKE THIS NUMBER (PLACE VALUE BLOCK DRAWINGS, EXPANDED FORM, WORD FORM, ETC)

CARDS

- *ROUND AND ROUND-REMOVE FACE CARDS. DEAL OUT 3 OR 4 CARDS FACE UP TO CREATE A 3 OR 4-DIGIT NUMBER. PRACTICE ROUNDING THE NUMBER TO DIFFERENT PLACE VALUES BY LOOKING AT THE VALUE OF THE CARD BEHIND THE PLACE VALUE YOU ARE ROUNDING TO. NUMBERS 5 OR HIGHER ROUND UP, NUMBERS LOWER THAN 5, ROUND DOWN.
- *MAKE IT TEXAS SIZE/MAKE IT RHODE ISLAND SIZE- REMOVE FACE CARDS AND 10'S. ACE= 1. DEAL OUT 6 CARDS FACING DOWN. SHUFFLE THOSE CARDS, AND FLIP OVER ONE CARD AT A TIME. DECIDE WHERE TO PLACE IT TO MAKE THE LARGEST (TEXAS SIZE)/SMALLEST (RHODE ISLAND SIZE) NUMBER POSSIBLE.
- * SPLIT DECK OF CARDS IN HALF. EACH PLAYER FLIPS OVER TOP 2 CARDS AND SUBTRACTS THE SMALLER NUMBER FROM THE LARGER NUMBER. THE PARTNER WITH THE GREATEST DIFFERENCE WINS. IF A TIE, PUT CARDS IN CENTER PILE AND WHOEVER IS WINNER OF THE NEXT ROUND GETS ALL THE CARDS.
- *THREE PLAYERS ARE NEEDED FOR THIS GAME. ONE IS THE LEADER AND THE OTHER 2 ARE THE 'MIND READERS': 2 PLAYERS DRAW A CARD WITHOUT LOOKING AT THEIR OWN CARD AND PLACE IT IN FRONT OF THEIR FOREHEAD. THE LEADERS SAY THE SUM OF THE 2 CARDS AND EACH 'MIND READER' MUST FIGURE OUT WHAT THEIR CARD IS. (CAN DO WITH MULTIPLICATION TOWARDS THE END OF THE YEAR OR AS A 4TH GRADER).

4TH GRADE

DICE

- *ROLL ALL 3 DICE AND ADD, WHOEVER HAS THE HIGHEST TOTAL WINS A POINT FOR THAT ROUND. (TRY THIS GAME USING 2 DICE WITH MULTIPLYING)
- *ROLL ALL 3 DICE, TRY TO BUILD THE LARGEST OR SMALLEST NUMBER POSSIBLE BY ASSIGNING PLACE VALUES ~ HUNDREDS, TENS, AND ONES TO THE DICE.
- *BUILD A NUMBER USING HUNDREDS, TENS, ONES ~ WRITE IT OUT. NOW WRITE THE NUMBER ONE MORE, ONE LESS, TEN MORE, TEN LESS, ONE HUNDRED MORE, ONE HUNDRED LESS.
- *BUILD A NUMBER USING HUNDREDS, TENS, ONES ~ SHOW IT IN DIFFERENT WAYS.

CARDS

- *SPLIT DECK OF CARDS INTO 2 PILES. FACE CARDS ARE WORTH 10, ACE WORTH 1 OR 11 (YOUR CHOICE). FLIP OVER 2 CARDS AT THE SAME TIME AS YOUR PARTNER. THE PARTNER WITH THE HIGHEST PRODUCT WINS ALL FOUR CARDS. IF IT IS A TIE, PLACE THEM IN THE CENTER PILE AND THE PERSON WHO WINS THE NEXT ROUND TAKES ALL OF THE CARDS.
- *THIS GAME IS FOR 3 PLAYERS. ONE IS THE LEADER WHILE THE OTHER 2 PLAYERS ARE THE 'MIND READERS': 2 PLAYERS DRAW ONE CARD, WITHOUT LOOKING AT IT AND HOLD IT UP TO THEIR FOREHEADS. THE LEADER SAYS THE PRODUCT OF THE 2 CARDS AND THE MIND READERS MUST FIGURE OUT WHICH CARD IS ON HIS/HER FOREHEAD.
- *TO HELP FIGURE OUT THE AREA OF A FIGURE AND TO PRACTICE MULTIPLICATION FACTS, USE CARDS TO BUILD SQUARES, RECTANGLES, AND OTHER SHAPES. GIVE EACH CARD A UNIT. EXAMPLE: 1 CARD = 2 UNITS. (USE THIS WHEN CALCULATING THE AREA OF THE FIGURE YOU BUILT).
- *DEAL OUT 7 CARDS FACE UP AND ARRANGE IN SEQUENTIAL ORDER. USE THESE CARDS TO FIND THE: RANGE: FIND THE FIRST AND LAST NUMBER IN YOUR SET OF CARDS AND SUBTRACT THOSE 2 NUMBERS, MODE: FIND THE NUMBER THAT OCCURS THE MOST IN THAT SET OF CARDS (MIGHT NOT BE ONE), MEDIAN: FIND THE CARD IN THE MIDDLE OF THE PILE, THAT IS YOUR MEDIAN NUMBER, AND MEAN: ADD UP ALL OF THE CARDS, AND THEN TAKE THAT TOTAL AND DIVIDE IT BY 7 (THE NUMBER OF CARDS YOU HAVE)