

5a. Knights

Objectives:

1. State and apply rules of movement for knights
2. Solve elementary problems using knights

The main objective of this lesson is to teach the rules of movement for the knight.

After this lesson, the students will play with all the pieces except the queen and king in order to practice the rules of movement. Just like the pawn game, the winner is the first to get a pawn to the last rank, to capture all the opponent's pawns (not pieces), or to achieve a position in which it is the opponent's turn to move, but the opponent has no move and the player does.

Outline of lesson:

1. Review of bishop/rook rules
2. Check bishop/rook homework
3. Moving the knight
4. Playing with all the men except the king and queen

**PART 1:
REVIEW OF
BISHOP/ROOK
RULES**

Quickly review the rules of movement for the rook and bishop through demonstration and questioning.

**PART 2: DON'T
START WITH
THE KNIGHTS
UNTIL THE
STUDENTS ARE
COMFORTABLE
WITH PAWN,
BISHOP AND
ROOK**

It is suggested that a substantial amount of time be spent demonstrating and discussing the rook and bishop problems before continuing with this lesson. Students should master the use of the rooks, bishops, and pawns before learning to move the knight.

**PART 3:
MOVING THE
KNIGHT**

Place a knight in any center square of the board and demonstrate the movement of the knight. A knight moves two squares horizontally or vertically, then one square at a right angle, forming the letter "L". The knight is the only piece that can jump over other chessmen. Place a knight on a central square of the board and ask a student to place a pawn of the opposite color on the squares the knight controls. Then have other students name the other squares the knight controls from that central square of the board. Note that the knight controls 8 squares.

**moving the knight
from a square on
the edge of the
board**

Then place a knight on the edge of the board and have a student place pawns on the squares that knight controls. Have the students name the squares the knight controls from the edge. There are a total of four, unless it is close to the corner, in which case it is three.

**moving a knight
from a corner**

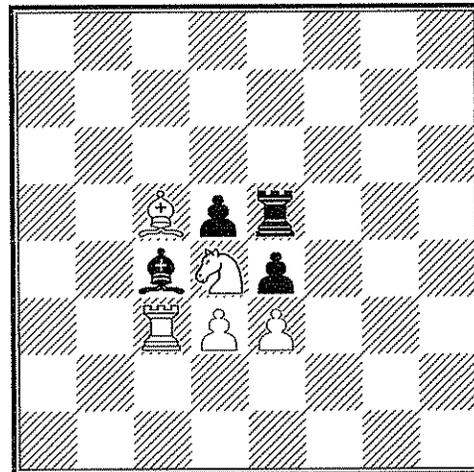
Place a knight in a corner of the board and repeat. The knight controls only two squares.

Ask the students on what part of the board the knight is strongest. Emphasize that the knight is strongest in the center because it controls more squares. Point out that this is true for the bishop also. The general principle here is that **pieces are stronger on squares nearer the center**. "Centralizing" pieces is one of the three ideas that determine good moves during the opening of a chess game.

**center, edge,
corner**

Knights attack 8 squares from a center square, 4 squares from an edge, and 2 from a corner.

knights jump over



Set up the position on the left and demonstrate the knight's ability to jump over the other chessmen.

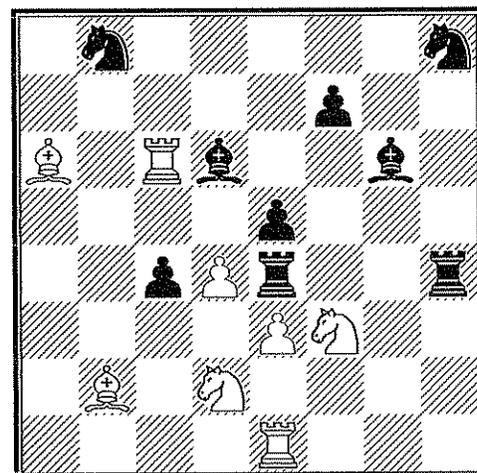
The knight may jump over its own men and the opponent's men.

In this position, the knight controls eight squares but may not capture anything.

Set up the position on the right and ask these questions:

(a) How many squares does each knight control? (Ans. d2 knight controls 6, f3 knight controls 8, b8 knight controls 3, h8 knight controls 2.)

(b) To which squares can each knight move? (Ans. d2 knight to b1, b3, c4, e4 and f1, the f3 knight to d5, g5, h4, h2 and g1, the b8 knight to a6, c6 and d7, and the h8 knight may not move anywhere.)



(c) Which knights are creating forks right now? (Ans. All except the knight on h8.)

Use the answers to these questions to demonstrate a knight capture, the knight's ability to jump over men, and to reinforce the general principle that knights are stronger on squares that are closer to the center.

a knight controls only squares that are the opposite color of the square it is on

Return the knight to the center and ask about the color of the square the knight is standing on and the color of the squares it controls. Repeat on an edge and in a corner. **RULE:** The knight controls only squares that are the opposite color of the square it is standing on.

good moves for knights in the beginning of the game

Place both white knights in their positions at the beginning of the game. Solicit good first moves for the knights (Nf3, Ne2 for the King's knight, and Nc3, Nd2 for the queen's knight). Bad first moves are Na3 and Nh3. Moving toward the center is what matters here. "Knights on the rim are grim" is a chessplayer saying that tells of the weakness of knights on the edge of the board.

knights on the rim are grim

knight forks

A fork is defined as one chessman attacking more than one of the opponent's chessmen. Place two white pawns on b4 and e5. Ask: "On which square should the black knight be placed so that the knight attacks both pawns simultaneously?" (d3 and c6 both are correct answers.) Do this type of exercise several times. A position in which a knight is attacking two men simultaneously is called a **knight fork**. A knight fork is one of many different kinds of double attacks.

a knight moving to fork two men

Set up white pawns on d6 and g7 and a black knight on e3. Ask: "To which square can the knight move to attack both pawns simultaneously?" (f5 is the correct answer.) Repeat this kind of exercise.

**PART 4:
PLAYING WITH
ALL THE MEN
EXCEPT THE
KING AND
QUEEN**

Students can now compete with all the men except the king and queen. Again, the rules for winning are the same as with the pawn game. Because the knight does not move in a "straight" path as do the bishop and rook, it is very important that the teacher confirm that every student has mastered the movement of the knight before moving on to the next lesson. The teacher should allow time for competition using the knights.

It usually does not take long for all but the youngest students to master the use of knights.

5b. Queens

Objectives:

1. State and apply rules of movement for the queen
2. Solve elementary problems using the queen

The main objective of this lesson is to teach the rules of movement for the queen.

After this lesson, the students will play with all the pieces except the king in order to practice the rules of movement for the pieces.

Outline of lesson:

1. Review of knight rules
2. Check knight homework
3. Moving the queen
4. Competition with all men except the king

**PART 1:
REVIEW OF
KNIGHT RULES**

Review the rules of movement for the knight. Be sure to include these ideas:

- Knights are stronger on squares closer to the center because they control more squares.
- Knights are the only chess men that can jump over other chess men.
- Knights attacking more than one man simultaneously is called a "knight fork," a kind of "double attack."

**PART 3:
MOVING THE
QUEEN**

Place a queen near the center of an empty board. Tell the students that the queen moves like a rook and a bishop put together. Demonstrate the movement of the queen, and have the students count the number of squares a queen attacks from the center of an otherwise empty board (27 squares).

Now place the queen on the edge and have the students count the number of squares the queen attacks from the edge of the board (21 squares).

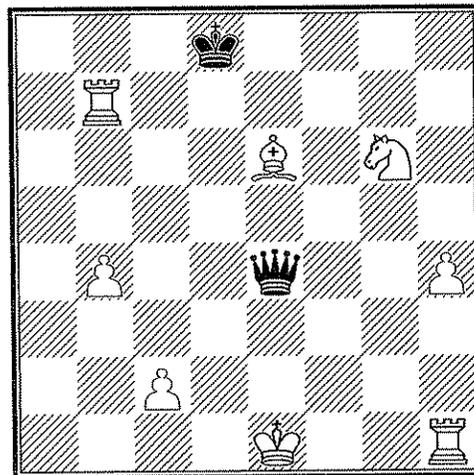
**pieces stronger
toward center**

Again, pieces are stronger toward the center because they control more squares.

**demonstrate
queen captures**

Demonstrate how a queen captures. Demonstrate the black queen capturing a white piece and note that a white piece (or pawn) may capture the black queen.

**queen multiple
attacks**



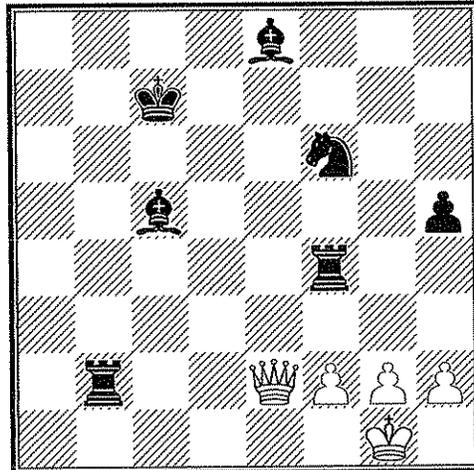
Set up the position on the left and demonstrate that the queen is attacking of the white men on the board. Explain that this is an example of a queen attacking more than one man simultaneously. Ask a student what attacking more than one piece with just one of yours is called. The correct answer is, "a fork."

Queens are very powerful

Any chessman may fork pieces and pawns of an opponent. One very powerful characteristic of a queen is that it can attack many of an opponent's men at the same time. Ask how many different directions a queen may attack. (The answer is eight.)

What other piece may attack in so many directions? (The knight, and it has greater restrictions on its movement.)

Set up the position on the right. Ask which square the white queen can move to so that it is attacking all the black men at the same time. The correct square is e5. How may black defend all of its pieces except one? (Bd6) Which piece has been left undefended? (Rook on b2)



**PART 4:
COMPETITION
WITH ALL MEN
EXCEPT THE
KING**

Have the students set up all the men except the king in their starting positions and play the game. The rules for winning are the same as for the game played with only the rooks, bishops, and pawns. It is not as important to allow for practice with the queen because the queen moves so much like the rook and bishop that the students will be very familiar with its movements. We recommend that the teacher move on to the king very quickly after some practice with the queen.