FORMAL MODELS

We'll learn five card games today. Identify the formal organization of each.

FORMAL ORGANIZATION

        mathematics: domain, operations, axioms
        algebra: pattern, match and substitute, equations
        modeling: state space, state transitions, decision models
        human factors: functional problem space, tasks, strategies
        life: events, property maps, behaviors

THE GAMES

1. *Pick a Card:*
        Each player draws a card from a standard deck, without looking and without replacement. Everyone looks.

2. *War:*
        Each player picks a card. Everyone looks. Highest card wins all the other cards.

3. *Indian Poker:*
        Each player picks a card. Without looking, hold the card to your forehead so that all other players can see it. Simultaneously, every player either folds or bets. Highest betting card wins all bets.

4. *Psychout:*
        Each player's hand consists of one suit. A different suit defines the point cards (A = 1, ..., K = 13). A point card is exposed. Each player selects a card from the hand, without replacement, as a bid for the point card. Highest bid card wins the point card. Repeat for 13 plays. Highest accumulation of point cards wins.

5. *Elusis:*
        The game master writes down a secret pattern rule for a sequence of cards. In turn, each player freely selects a card from the deck, without replacement. The game master tells if the card fits the secret pattern. The player to name the secret pattern wins.