Poker Faces
By Thomas Snyder

This puzzle is a combination of spot-the-differences puzzles and "black box" logic puzzles, with a *large amount* of careful observation needed to succeed.

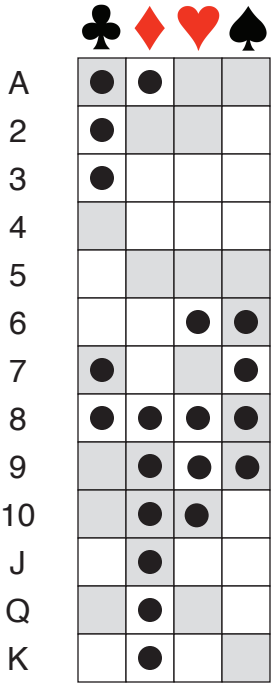
First, teams will most likely identify the eight types of markings on each of the cards (described on the attached sheet). Then, they will try to assign why the marks are on the cards they are. Some systems are pattern-based (such as the 3-cycle and 4-cycle) while others are mathematical (using primes or even/odd parity). The last two, which are invariably the hardest for teams to sort out, are again observational. There are 10 cards in POKER FACES at the top of the puzzle sheet and these form another set (as well as serving a role later). There is also a "useless" card with Poker Hand Rankings on it that teams may not look at for very long (or even forget to take out of the box!) that just happens to have its corner clipped. Any card on the ranking sheet forms the group for cards with a corner clipped.

Once teams have all the markings sorted out, they can reverse the process to ID the seven cards in Mr. Evil's hand: namely the 8s, 9d, 10c, 10d, 10h, Jd, Qh, giving him a queen high straight.

Giving the right hand ID earns a peek at the other 16 cards dealt out to the opponents. A deck of cards has 2x26 cards (two alphabets) and various methods can be used to convert from ranks to letters but the POKER FACES at the top enforces a black low/red high scheme. Reading cards this way (black A = A, black 2 = B, …, black K = M, red A = N, …, red K = Z) spells out Mr. Evil's message: "TO FOLD IN MARRIAGE" which gives the evil answer DIVORCE.

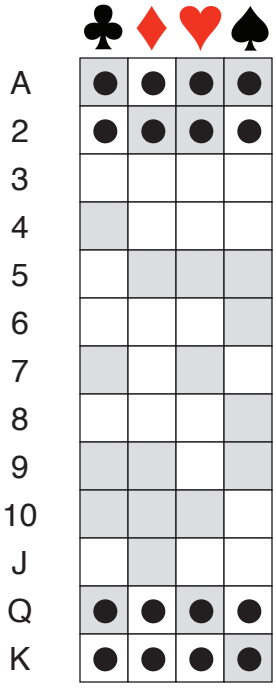
Clipped corner

Card on Poker Hand
(also with clipped corner)

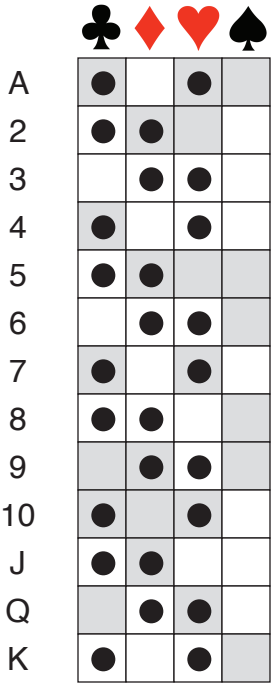


Scraped wheels

Two low/high cards

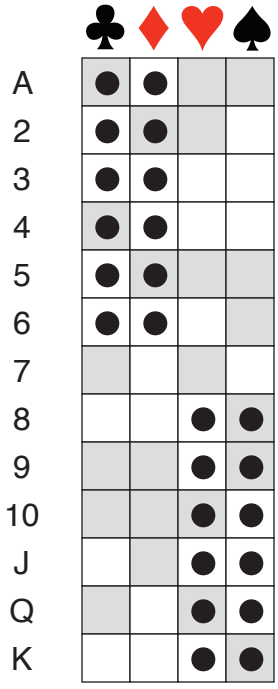


1 wedge in
each corner shaded
3-cycle of
CDH (two of each rank)

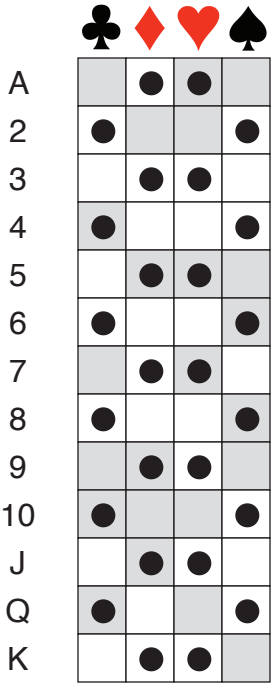


Slashed side

A-6 in CD
8-K in HS

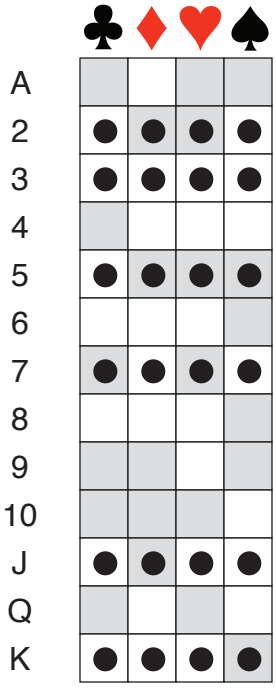


1 Bird on each half
shaded in
Odd Red
Even Black



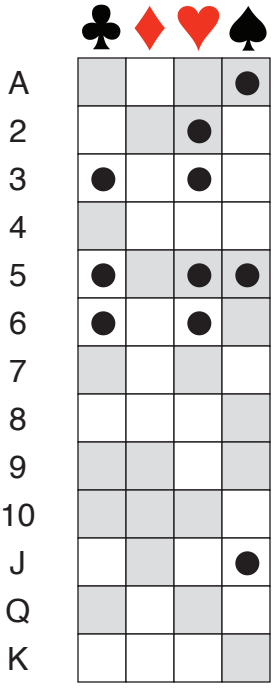
Stem on one "spade"
on edge shaded

Primes



Pinhole in center

On Poker Faces
picture



White-Out dot

4-cycle in all
suits