

The tactical game shortly after the Big Bang

**The Big Bang**... Deriving from nothing, the matter merges into celestial bodies consisting of different elements. The players have to see how to secure most of them for themselves...

#### Content:

- 4 astronauts in 4 colours
- 4 comets in 4 colours
- 32 elements in 3 colours
- 40 asset markers in 4 colours
- 1 die

# Aim of the game:

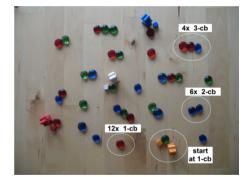
Each player travels with his astronaut from one celestial body to another and there secures ownerships at free elements. The players exert influence on the allocation of the different elements, which at the end of the game decide on the winning points; the player with the most winning points wins the game.



Each player receives the games pieces of one colour (when playing with 4 players, one cube per colour is put back into the box). One player takes the 36 elements (glass stones) into his hands and lets them fall onto the table ("Big Bang"). Then the players arrange the elements arbitrarily in given groups, forming 22 celestial bodies (CBs):



- 4 CB with <u>three</u> elements each (at least two different elements); placed in a row
- 6 CB with <u>two</u> elements each (arbitrary combination of colours)
- 12 CB with one element each



Starting player is the player who knows most stellar constellations. Beginning with the starting player, the astronauts as well as an asset marker is placed at a 1er-CB, whereas all astronauts have to stay at different CBs.

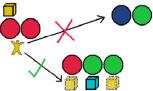


### Playing the game:

The players take turns until all asset markers have been placed. One move consists of the three actions rolling the die (i), moving the astronaut (ii) and modification of the CB (iii), to execute in that order.

- i) One rolls the die. Depending on the result, the player later on in action (iii) combines two CBs into one or separates CBs. With the knowledge on that, the player first travels to another CB (ii).
- ii) One has to move ones astronaut to another CB. The CB the player leaves and the CB the player travels to, at least must have one element of the same colour and there must at least be one free element on the destination CB (without asset marker). At the destination CB, the player marks one of the free elements with one of his asset marker from the supply, placing it directly in front of the element. In case a player cannot travel due to the element colours, one remains at the current CB and here marks a free element. If no element is free, one asset marker hast o be removed from the game.

**Example**: The orange player is standing at a 2er-CB with two red elements. He therefore cannot travel to the 2er-CB with blue and green elements (above). The journey to the 3er-CB (below) with red element is



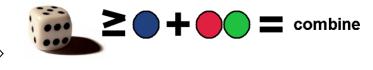
permitted. There, he can place his astronaut and an asset marker to the red or the green element..

**Tip**: The choice of the CB the astronaut is being moved to, is important, because of the asset marker to be placed there at a free element. The player should also have in view the colours of the elements on the CB they move to, since these specify the travel possibilities of the next turn.

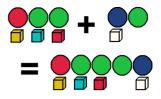
iii) Dependent on the result of the die, the player now combines or separates CBs currently not visited by astronauts. The active player has to look for the two CBs with the fewest elements (glass stones) without astronauts - and calculates the sum of their elements. At the beginning this is always two 1er-CBs (sum 1+1=2).

**Example**: In case there is only one CB without astronaut that contains one element and the next largest CB without astronaut is a CB with three elements, the sum is 1+3=4.

Combining: If the result of the die is bigger or equal to the calculated sum, the player has to combine two CBs. However, only CBs without astronauts can be combined. The active player chooses one of the smallest CBs and combines it with another CB. However, the sum of the elements on both CBs may not be higher than the result of the die! The player combines the two CBs, seeing to it that the current allocation of the elements remains.



**Example**: The die shows a 6. The player combines a three and a two CB (currently the smallest CBs without astronauts) and forms a five CB. For a better overview, the elements of the same colour are being placed next to each other, the asset markers staying at "their" element.



**Tip**: In the long run, the players receive winning points dependent on the number and combination of the elements and their asset markers on the CBs. Since by combining the number of elements on a CB rises, it is lucrative to have one's asset markers at CBs with as much as possible elements. Likewise, one can use the combination of CBs to create majorities or to add elements in order to take away potential points for the other players. The evaluation system is described on pages7 und 8.

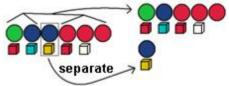
Separation: If the result of the die is smaller than three AND smaller or equal to the number of elements on the smallest CB, then the player has to split one of the CBs <u>without</u> astronauts into two. One of the two new (separated) CBs must have as many elements as the result of the die. The player decides on which elements he separates, however, the asset markers remain as assigned.



In case a 2 was rolled and the smallest available CB has two elements, then one can (for example) divide a five CB into two - one part with two and one part with three elements. A 1 with the die always leads to the separation of an individual element.

**Example**: After rolling a 1, a six CB is separated into a five CB and a 1 CB. The allocation of the asset markers remains unchanged.

### Tip: Also when separating,



winning points has to be kept in mind. In the example shown, it could be blue's turn, since he profits most of the separation of the element with the orange asset marker. While before he would have received 2 winning points for his asset marker, afterwards he will receive 4 points (valuation methodology is explained on pages 7 and 8). One should always try to change the allocation of elements in his favour or to the disadvantage of the fellow players.

#### Usage of the comet:

Once in the game the player can use his comet (wooden disc), which thereafter is removed from the game. It can be used as follows:

• One can combine two CBs, as long as the sum of their elements is not higher than the result of the die. There may also be astronauts on the CBs - thus it must not be used the smallest CB available.

- One does not travel to another CB, but remains at the current one and places an asset marker on an element there.
  *Tip: This can be useful e.g. for the protection of a majority.*
- When travelling, the start and finish CB must not have a corresponding element. I.e. one may travel to any CB with free elements.
- If the comet remains unused until the end of the game, the player receives one winning point.

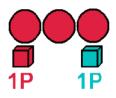
#### End of the game and evaluation:

If the players have used up all their asset markers, the game ends. All CBs then are rated separately. **CBs with one element generally do not count**, even if an asset marker is placed there. On all larger CBs with asset markers the different elements are rated as follows. Are there (from an element colour):

- only **one element**, the asset marker counts as many points as there are elements of different colours on the CB. For **example**, an asset marker placed at a blue element on a six CB counts five points (see example below).
- exactly two elements, each asset marker is worth two points. If a player has two asset markers here, he receives two points for both asset markers.

• more than two elements, only the player with the majority of the asset markers at these elements receives points. He scores once (not per asset marker) as many points as there are elements of the appropriate colour on the CB (see illustration at the bottom left hand corner, valuation of the red elements for White). If the majority is not clear, the players involved score one point for each marker (see illustration down right, valuation of the three CB with only red elements).





**Example**: Blue receives five points, because he occupies the only blue element and there are five other elements. Orange as well as red receives two points, because there are exactly two green elements. Furthermore, red receives (as does blue) still another point for the small CB on the right, since there is no majority in view of the three red elements. White receives three points because there are three (= more than two) red elements in the left CB and it has the majority, why orange does not get any point here.

Players, who did not use their comet, receive one bonus point. The player with the highest score wins the game. A tie is a tie.

### Special rules for a game with two players:

### Set up:

Each player selects one of the two remaining player colours as secondary colour and of these colours eight asset markers (the remaining material is not used).

### Playing the game:

- Between the throwing of the die and the travelling of the active player, the opponent player places an asset marker of his secondary colour at a free element of any available CB that has maximally as many elements as the result of the die. In case there is no CB that fulfils this condition, this action is void.
- In case the opponent has placed an asset marker of his secondary colour, the active player changes two CBs. First, he combines/separates according to the basic rules, then he combines/separates for the opposite pips on the die. For example, when having thrown a 5, the player alternates the CB for the 5, afterwards for the 2 (opposite value on the die).

#### End of the game and valuation:

 The secondary colours are valuated as in a game with four players.
 In case of a tie, the player wins whose secondary colour received more points. In case a secondary colour should win, both players loose.

### Variant:

Black holes develop during the game and cannot be separated. Astronauts cannot travel there; asset markers there will bring no points.



How does it work? – A six CB with two blue, two green and two red elements is defined as Black

Hole. If such a combination develops, the game proceeds as follows:

- All markers at elements in the black hole will be removed from the game (no points).
- Astronauts standing at an evolving black hole will be returned to the players and can be placed at any CB with free elements in the next turn of the player.
- The black hole cannot be visited anymore. In order to indicate this, the elements of the black hole are arranged in a circle.
- All players discard an asset marker of their supply (if available). In case there was none or only one asset marker at the evolving black hole, in a 2 or 4 player game, every player has to remove a second marker from his supply. In case all players are out of markers, the game ends immediately. Otherwise, the game commences according to the rules.



#### Big Bang – background:

The Big Bang was the event which led to the **formation of the universe**, according to the prevailing cosmological theory. According to that model, the universe, originally in an extremely hot and dense state that expanded rapidly, has since cooled by expanding to the present diluted state, and continues to expand today. Based on the best available measurements as of 2010, the original state of the universe existed around **13.7 billion years ago**.

If the distance between galaxy clusters is increasing today, everything must have been closer together in the past. This idea has been considered in detail back in time to **extreme densities and temperatures**, and large particle accelerators have been built to experiment on and test such conditions, resulting in significant confirmation of the theory.

**Fred Hoyle** is credited with coining the term "Big Bang" during a 1949 radio broadcast. It is popularly reported that Hoyle, who favoured an alternative "steady state" cosmological model, intended this to be pejorative, but Hoyle explicitly denied this and said it was just a striking image meant to highlight the difference between the two models.

## Valuation aid:



One element per colour

= as many points as elements in different colours (here: 4 points for Orange)



Exactly two elements per colour = two points per marker (here: 2 points for White and Orange)

More than two elements per colour:



= as many points as elements in that colour for the player with the <u>majority</u> (here: 4 points for White)



= as many points as asset markers for the players involved, in case no-one has the majority (here: 2 points for White and Orange)

**Tip**: CBs with only one element generally do not score and can be removed from the table. With them, the players can count the score: blue = 1 point, green = 2 points, red = 5 points