



How to play

For each player, you need: 3d6, one player sheet, a pencil or pens and ideally a ruler and an eraser. The game takes about 10 minutes to play.

In Snowflakes, you roll dice to generate the elements of a snowflake, and then draw your creation based on those dice rolls and choices. The snowflake consists of 31 sections - the centre section, then five rings of six segments each. As you allocate dice, you are aiming to fill as many of the 31 sections as possible while earning the most attractive symbols from which to build your snowflake. There are over 2 million possible snowflakes you could make!

The game consists of several phases:

A. Roll Phase: each player rolls 3d6, seven times (for a total of 21 dice rolled).

For each set of three dice, allocate each die to one of the tick boxes on your sheet, each corresponding to a ring, a segment or a symbol of the snowflake. The combination of Ring and Segment determines which sections of your snowflake you will be able to fill in. The Symbol determines what you will fill those sections with. Rolling a '1' is slightly different to the other numbers - here's how:

The first '1' that is allocated to 'Ring' allows you to tick/fill in the centre section of your snowflake. When you tick the centre section, your Segment die for that round can be used as a second Symbol die that turn only. Subsequent 1s rolled can be placed in Ring or Segment to fill in any one section of any Ring (even if you do not have the right dice for that Ring). 1s effectively therefore act as wildcards. If you place a '1' in your Symbol space, you can use it to upgrade your centre symbol.

When you allocate dice to a Symbol, tick the corresponding box on the first available row for that number. If you allocate the same number to a symbol in subsequent rounds, you can upgrade that symbol by ticking the box in the next row down. If you roll more than three of the same symbol dice, tick the 'spare dice' boxes beneath the symbols - these can be traded later on or can get bonus points.

If your dice rolled mean you could only tick sections that have already been ticked, then you are not able to use those dice.

Example 1: You roll a 3, 4 and 5. You decide to allocate 4 to Ring, 3 to Segment and 5 to Symbol. You can therefore tick 3 non-adjacent sections of Ring 4, and tick the first row of Symbol 5. You could also have decided to allocate 3 to Ring, 5 to Segment and 4 to Symbol - in that case you would tick any two sections of Ring 3, and tick the first row of Symbol 4.

Example 2: You then roll 1, 1, 1. You tick the centre section for your first 1, and tick any other section for your second 1. You use your third 1 to tick the '1' symbol box and upgrade your centre symbol. You could also have used your third die to tick any other section on the grid.

B. Trade Phase: Once you have rolled all 21 dice, you have the opportunity to make some changes. You can trade your dice rolls in any or all of the following ways:

(i) You can roll up to three additional dice, but each extra die rolled will cost you 2 points from your final score. Extra dice rolled can be used as follows:

- Place in Segment: fill in any 3 sections in that segment
- Place in Ring: fill in any 3 sections in that ring

- Place in Symbols: upgrade that symbol by 2 rows

You don't have to have ticked every segment and ring before you progress to the Draw Phase.

(ii) If you are missing a ring or segment, you can trade in any one of your spare symbol dice to tick one section. When doing this, you must work from the bottom symbol row upwards - that is, first trade out any extra dice, then those on the third symbol row, then the second row etc. You don't have to be able to fill in all sections of the snowflake if you can't or don't want to trade dice.

(iii) If you have more than one of the same dice values corresponding to a symbol (say, two threes, or three fives), you can decide to 'split' these - so if you have three sixes in your symbols, you could draw the 'level 1' symbol from the sixes column in sections on one Ring and the 'level 2' symbol in sections on another Ring. Or the Level 1 Symbol on three different Rings. Remember that you will need five symbols in total to be able to fill your grid (1 per ring).

Example: After 7 rounds of dice, I still have eight sections of my snowflake unticked. I decide to roll two more dice (which means -4 from my final score). I roll a 4 and a 5, and decide to tick three sections in Ring 5, and three sections in Segment 4, leaving only three blank sections (as the Ring and Segment intersect on one of those sections ticked). I could trade an upgraded symbol to fill in another section, but decide I don't want to do this.

C. Draw phase: Fill in your snowflake grid according to the dice you've rolled. Take your time - there's no rush!

Choose one of your symbols and allocate it to a ring (you decide which). Then draw that symbol into all of the available spaces on that ring of the grid.

If any sections were not ticked, just draw a line along the dotted line to join the adjacent sections of that segment together.

D. Admire phase. Score your snowflakes as follows:

- Score 1 for each section that has a symbol in it (up to 31) - don't score any sections that weren't ticked (and which only have a line in them).
- Subtract 2 points for each die rolled in the optional 8th round of dice (max -6)
- Add bonus points for any upgraded symbols that were used in a Ring (including the centre): +3 for a second-row symbol, +6 for a third-row symbol. You only get bonus points for the symbols you actually drew, not ones you had to trade out during the Trade Phase.
- Add 1 for any spare dice you didn't trade out (the extra dice in your symbol rows)
- Optional: if you are playing with someone else, give each other a mark out of ten for how nice your snowflake looks.
- Then add it all together. 25-30 is an average score, but it's possible to score 46. Can you score over 40?

...or if you don't want to keep score, just enjoy what you've created!

Scoring example: I still had four sections unticked, but I had a double 1 (+3), a double 5 (+3) and a triple 6 (+6) in my symbols. My final score was:

27 filled sections (31-4);

-4 for the two extra dice rolled;

+12 for the upgraded symbols

= 35 total

Multiplayer rules: If you are playing with more than one player, print one sheet per player. The basic game is the same, with one key difference. For each round of dice rolling, all dice are rolled together (so three players would roll nine dice per turn). Each player then takes turns to choose a die from all of those available, until all are gone. Dice are then allocated as above. The winner is the player with the highest score.



Snowflakes

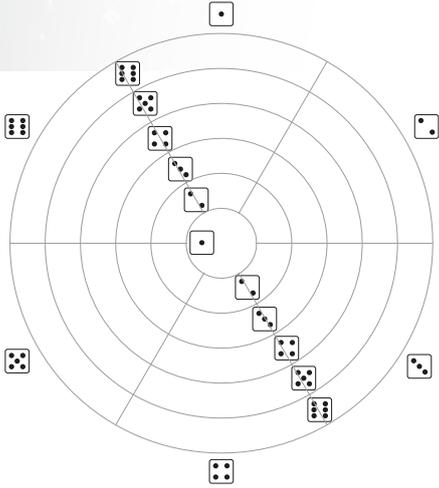


1. Roll 3d6.

2. Put your dice in here:

Ring	Segment	Symbol

Tick the sections as per step 3:



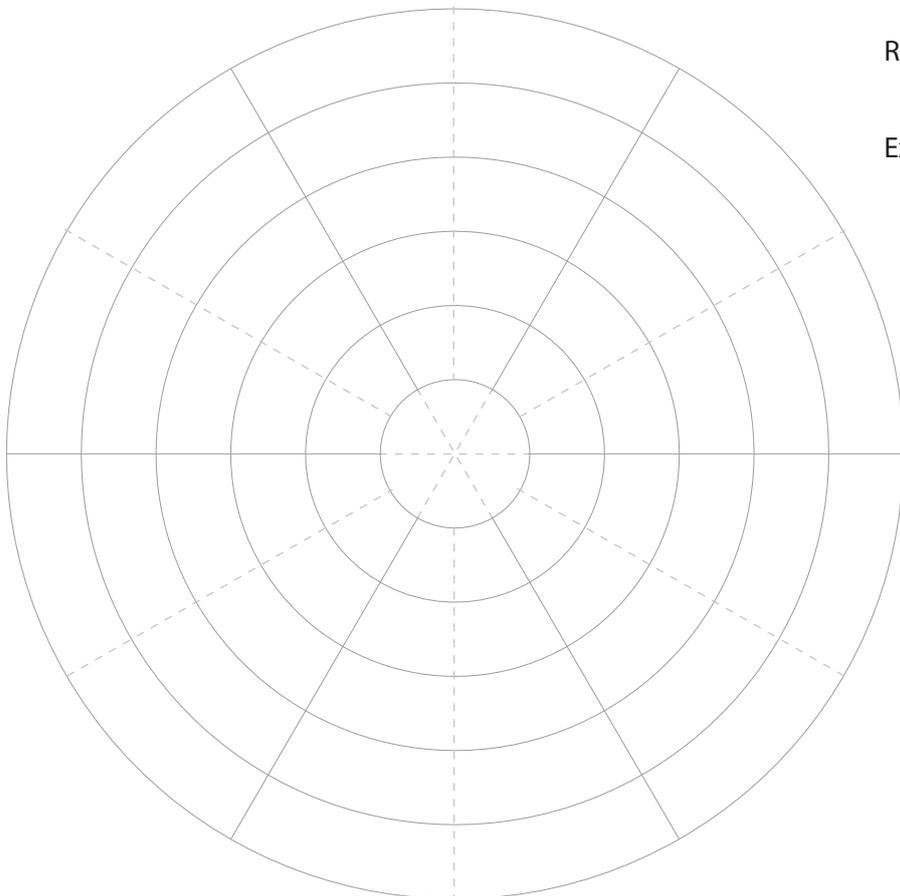
3. For your chosen Ring, tick these Segments:

- Tick the centre, or one section in **any** Ring
- Tick two opposite sections (1/4 or 2/5 or 3/6)
- Tick three non-adjacent sections (1/3/5 or 2/4/6)
- Tick two **pairs** of opposite sections
- Tick any two sections of your chosen Ring
- Tick all six sections of your chosen Ring

4. In the symbol grid, tick the symbol you chose, then roll the dice again:

5. After 7 rounds, trade your dice (optional)

6. Draw your snowflake in here:



	Snowflake centre		
Symbols			
Row 1			
Row 2			
Row 3			
Extra Dice			

Score:

Completed sections

+ Bonus symbols

+1 for each unused extra symbol

-2 for each extra die rolled



