



Toolkit for Educators

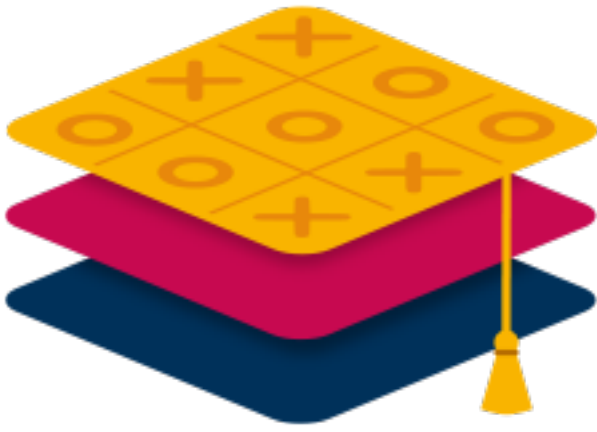
This toolkit is an educational tool that offers educators and adult education organisations the opportunity to create your own games and your own content in a participatory way.

It is designed in a way that it can be adapted to nearly every topic. The toolkit will also allow educators to teach students about the mechanisms behind games like clear goals, quests, challenges, points, rewards or instant feedback.

The toolkit is free to use to design your own games with it, to print and play with it for inspiration or other ways you see fit.

Have fun playing!

For more information, check teachingbygaming.eu



**TEACHING
BY GAMING**

INSTRUCTIONS FOR USE

INTRODUCTION

The TBG toolkit is designed for educators to help you design your own games for use in your own educational practice. The toolkit consists of:

- 3 canvas: Design, Define and Draft
- Tiles, in 11 categories
- Assignment Cards

For the prototype you will also need:

- paper, scissors, pens, colouring pens, glue, et cetera
- game components for your prototype, self made or bought: dice, tokens, game money, et cetera

How to make the toolkit:

- Print the 3 canvas on A4, white paper
- Print and cut the tiles on coloured paper, single or double-sided. The colours on the pages are suggestions, the tiles can be printed on colours of your choosing.
- Print the assignment cards on A4 white paper, double sided, and cut them to cards in A6 format.

How to use the toolkit

There are several ways to use the toolkit. Feel free to use it as you like! We have some suggestions, based on the purpose of the toolkit:

1. Learn how to make games

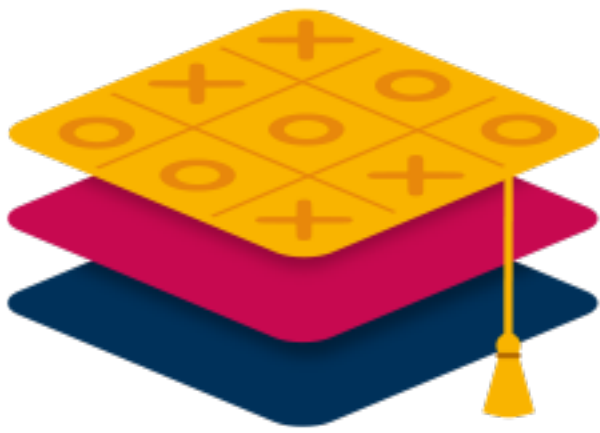
Start with assignment card 1 and work your way through the cards. Follow the instructions and do the exercises. You can do this in a group or solo. At the end of the cards you will have a basic grasp of game design and will have designed your own games.

2. Design your own games

Take the 3 canvas and the tiles. Start with the Define canvas and follow the instructions from 1 - 6 on the canvas. When ready take the Design canvas and follow steps 7 - 12 and then the Draft canvas with steps 13 - 18. After the last canvas you will have designed and played your own game!

3. Use the tiles

Take the tiles. Make piles from the different category tiles. Start with Category 1. Read the text from the starting tile: this is information about the Category. Use the rest of the tiles as inspiration to define the first Category. If the tiles are printed single-sided, use the blank backs of the tiles to write you own. If the tiles are printed double-sided, use the empty tiles. When done, read the next categories and decided which one is next. You don't need to strictly go from 1 to 11, but it helps with making decisions.



**TEACHING
BY GAMING**

TILES

SUBJECT

?

what is the game about?

1

SUBJECT

EUROPEAN VALUES

1

SUBJECT

DIVERSITY & INCLUSION

1

SUBJECT

CATS

1

SUBJECT

TEAMWORK

1

SUBJECT

A MODEL CALLED:

1

SUBJECT

EUROPEAN VALUES

What is Europe, history, culture, people, rules, institutions, values, travel, working, living.

1

SUBJECT

See examples of subjects for games, but really, anything and any subject can be made into a game and a playable experience.

1

SUBJECT

CATS

Taking care of cats, learning about them, being a cat, cats as game pieces.

1

SUBJECT

DIVERSITY & INCLUSION

What is diversity? Or inclusion? How to be inclusive? How to recognise when you are not inclusive?

1

SUBJECT

A MODEL CALLED:

What is model XYZ? What are the elements? How to work with this model?

1

SUBJECT

TEAM WORK

All about the team: how does the team function? What are good teams? How to collaborate? How to get to know each other, how to overcome conflict?

1

THEME

?

What is the story, the world, the visuals and the narrative of your game?

2

THEME

PIRATES

2

THEME

WILD WEST

2

THEME

THE OFFICE

2

THEME

SCI-FI

2

THEME

NATURE

2

THEME

PIRATES

Treasure chests, sea, sailors, parrots, gold coins, rum, naval warfare, cannons, ahoy matey!

2

THEME

Find inspirations in books, art, tv series or other games. A theme is enhanced by game actions, art & story and help play the game. Players tend to differ in their appreciation of a theme.

2

THEME

THE OFFICE

Work, weird co-workers, money, strange rules, horrible bosses, commuting, the daily grind.

2

THEME

WILD WEST

Saloons, shooting, drinking, gambling, cows, hats, horses, spurs, frontier, train robbery, outlaws.

2

THEME

NATURE

Trees, meadows, gardens, volcanoes, birds, insects, gardening, mining, planting.

2

THEME

SCI-FI

Space ships, planets, outer space, future, time travel, laserguns, aliens.

2

LEARNING GOALS

?

What do players need to learn from playing your game?
Only applicable in applied / serious games

3



LEARNING GOALS

KNOWLEDGE

3



LEARNING GOALS

ATTITUDE

3



LEARNING GOALS

BEHAVIOUR

3



LEARNING GOALS

**UNDER-
STANDING**

3



LEARNING GOALS

**COLLABORA-
TION**

3



LEARNING GOALS

KNOWLEDGE

All goals that require players to learn something about a new or changed subject, topic, model or process.

3

LEARNING GOALS

An applied or serious game is played to learn something. This can be anything: new knowledge, different attitude or better behaviour. It's very important to define these goals up front and test extensively.

3

LEARNING GOALS

BEHAVIOUR

All goals that require players to express, discover, recognise and/or change their behaviour regarding certain subjects or topics.

3

LEARNING GOALS

ATTITUDE

All goals that require players to express, discover, recognise and/or change their attitude to certain subjects or topics.

3

LEARNING GOALS

COLLABORATION

All goals where players need to (learn to) work together to achieve a shared goal.

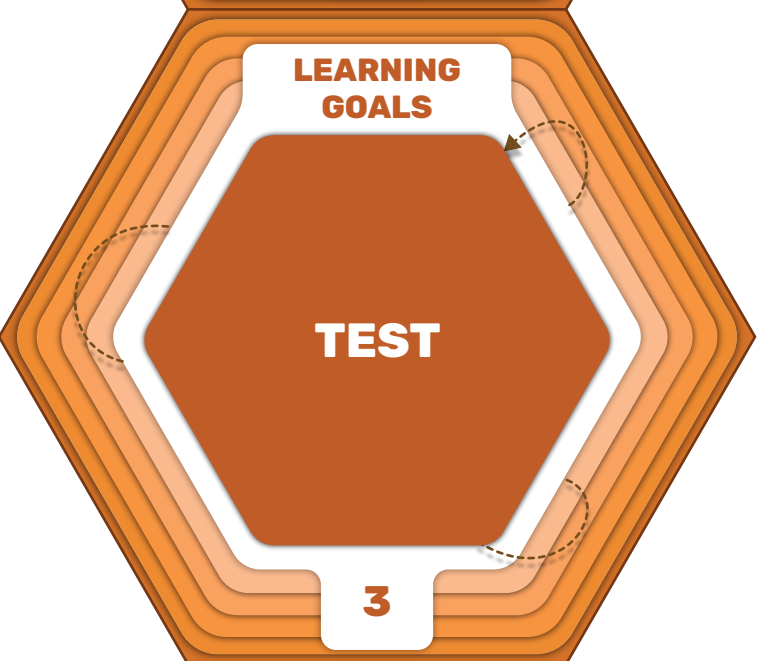
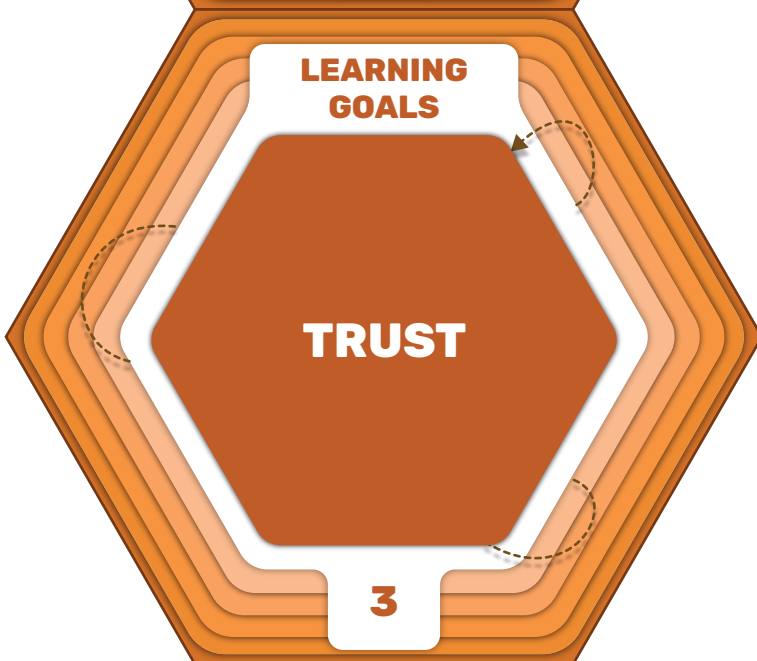
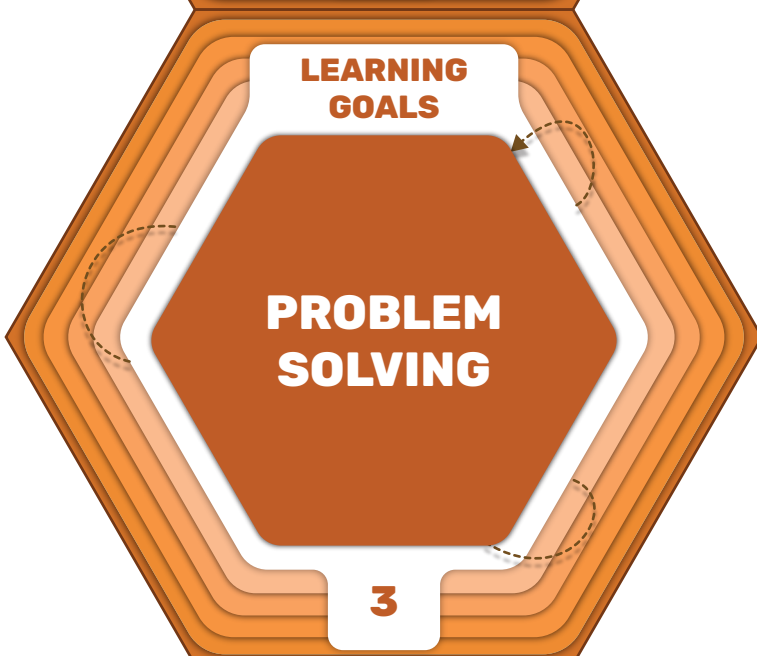
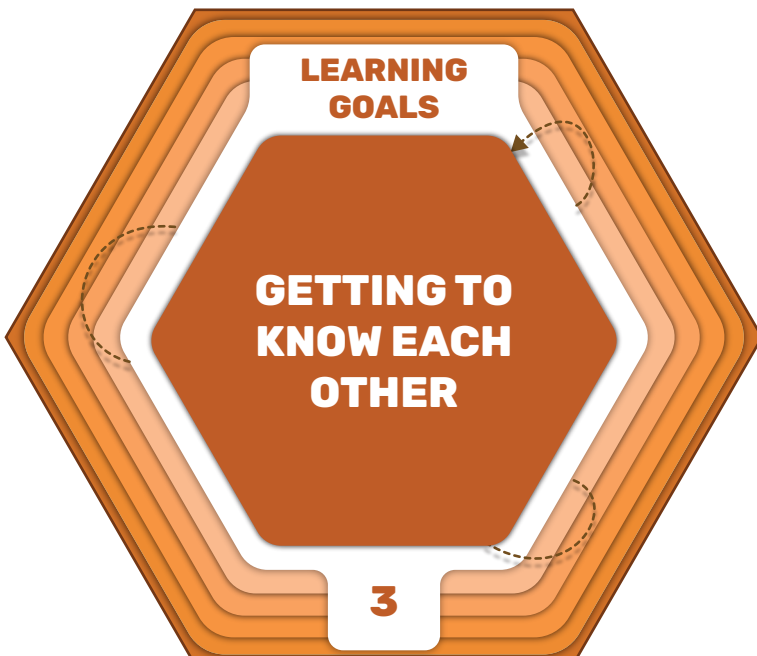
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LEARNING GOALS

UNDERSTANDING

All goals that help players understand anything you want them to understand, be it facts about a new subject or attitude or behaviour.

3



LEARNING GOALS

CHANGE

All goals where players need to change something, from their own behavior to processes within their company to group dynamics to filling in forms, et cetera.

3

LEARNING GOALS

GETTING TO KNOW EACH OTHER

All goals where players have to acquire more knowledge about the other players.

3

LEARNING GOALS

COMMUNICATION

All goals where players need to (learn how to better) communicate with each other or with others about subjects where communication is seen as a problem.

3

LEARNING GOALS

PROBLEM SOLVING

All goals where players need to solve a problem, from small to bigger problems, from real to fictional problems.

3

LEARNING GOALS

TEST

The goal of the game is to test a new system, workflow, policy or organization.
Or to test every individual player for their skills.

3

LEARNING GOALS

TRUST

Each player is assumed to know the (shared) strategies of the other players, and no one has anything to gain by changing only one's own strategy.

3

PLAYSPACE

?

Where and how is your game played

4

PLAYSPACE

SOLO

4

PLAYSPACE

GROUP

4

PLAYSPACE

ONLINE

4

PLAYSPACE

OFFLINE

4

PLAYSPACE

OUTSIDE

4

PLAYSPACE

SOLO

When playing solo there are no other players to get the action going or provide a social element.

4

PLAYSPACE

The place and way the game is played. Different play spaces ask for different types of games, actions, rules, et cetera. Surroundings and people have a profound effect on how the game is played.

4

PLAYSPACE

ONLINE

An online game needs a working wifi connection and a device. Some games can be played hybrid: one part plays on a table, the other part at home on a device.

4

PLAYSPACE

GROUP

Groups with 4-5 are easier for social interaction, smaller is more difficult. Bigger groups can be split up competing with each other.

4

PLAYSPACE

OUTSIDE

When a game is played outside you need to make your game "outside" proof: weather, visibility, size, et cetera. Helps to get your players moving.

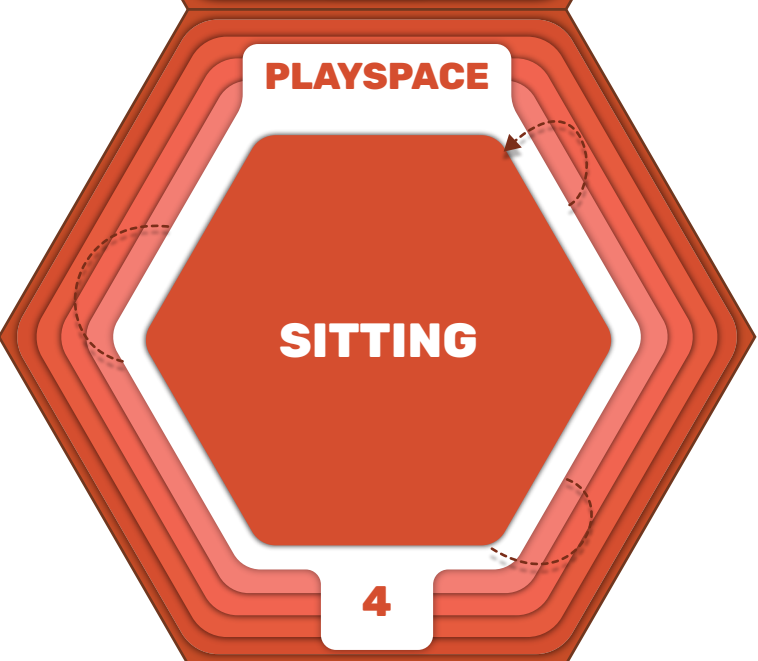
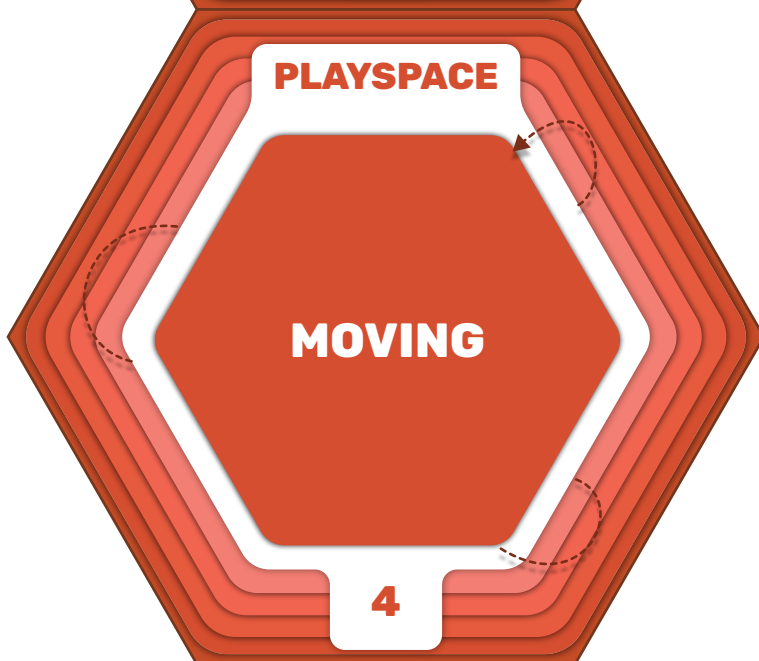
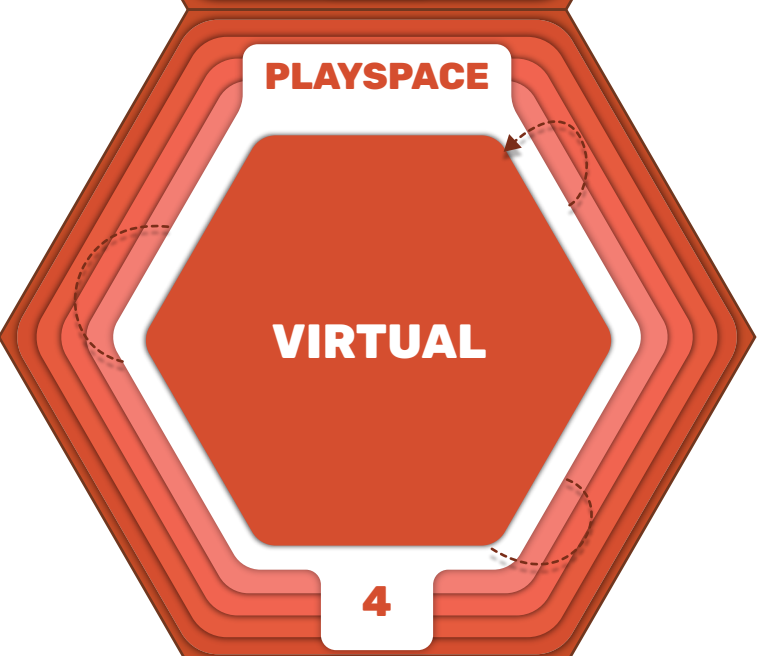
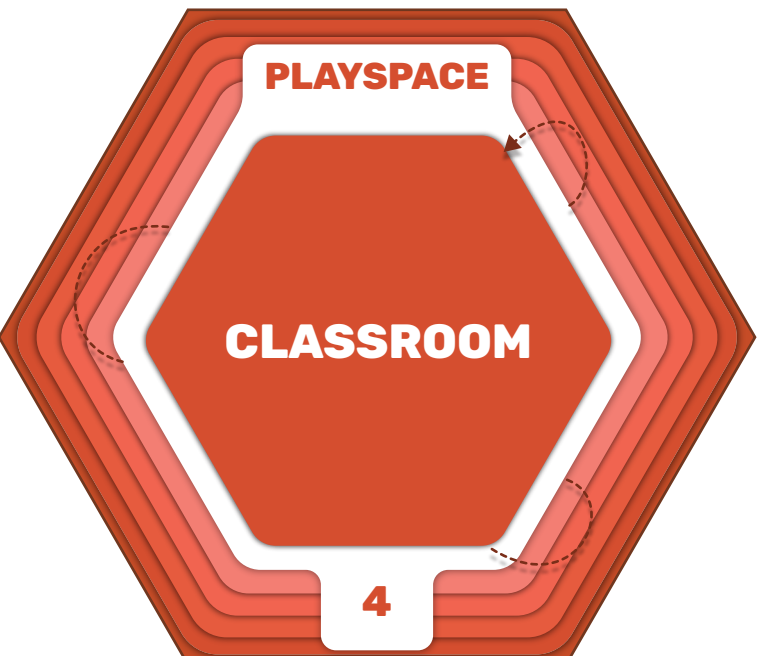
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PLAYSPACE

OFFLINE

On a table, a floor, a room, in a house, classroom or office. No devices, just the players and the game.

4



PLAYSPACE

CLASSROOM

School rules apply. How many players? How can groups be made? How long are lesson hours? What is the attention span of the pupils/students?

4

PLAYSPACE

WORK SPACE

Office rules apply. Where will the game be played? Office? How big? Canteen? Meeting room? What is the noise level? Are you disturbing your co-workers?

4

PLAYSPACE

VIRTUAL

Played on a VR device. Where is the game played? How many devices are there? Not everyone is used to or likes VR. People can get queasy or scared.

4

PLAYSPACE

HOME

Games played at home tend to be played with families and/or friends, on a table or couch.

4

PLAYSPACE

SITTING

Played while sitting at a table with the game components. But also on couches, chairs in a circle, on the ground surrounding a campfire.

4

PLAYSPACE

MOVING

Played while moving. Use keycards, baskets, table spaces where they can play and chairs. If outside use mobile game assets or spray paint QR-codes or...

4

PLAYERS

?

Who plays your game?

5

PLAYERS

KIDS

5

PLAYERS

TEENS

5

PLAYERS

YOUNG ADULTS

5

PLAYERS

ADULTS

5

PLAYERS

SENIORS

5

PLAYERS

0 - 12

Supervised by adults.
Every age has new possibilities and restrictions.
Screen time limits.
Enthusiast, loud, playful.
Home, playground, school.

5

PLAYERS

The people who play your games: age group plays a big role, but also if the players want to play your game for themselves or because it is mandatory in a classroom or workspace.
And, do they even like games?

5

PLAYERS

18 - 25

Friends, co-workers.
School, college, new at a job.
Live at home or with roommates. Thinking about career, life and relations.

5

PLAYERS

10 - 18

Rapid changes in body and brain, puberty hits (hard), sexuality, identity, emotional and social regulation, all is in flux.

5

PLAYERS

60 - 80 AND BEYOND

End of work life.
Habits and living conditions mostly fixed. Grandparents.
Tribulations of old age: health, cognitive and physical concerns.

5

PLAYERS

25 - 60

First real jobs, career changes, home life, kids, caring for parents, work-life balance, settling of values and identity.

5



PLAYERS

VOLUNTARY

Intrinsic motivation to play games. Find these players in difficult spaces, like the office. They will help you get the game played and help with their enthusiasm.

5

PLAYERS

MIXED GROUP

A family or a group of co-workers. Take extra care to find common grounds, keep it fun for all players with all backgrounds and levels of expertise.

5

PLAYERS

LIKE/LOVE

They like/love games, but not necessary yours. Run a quick test, ask if they like/love games. If yes, why and what type. Consider these answers in your design choices.

5

PLAYERS

MANDATORY

Players need to be extrinsically motivated. Rewards, fun gameplay, social interaction, good food, beautiful components help. Still, not all will love the experience.

5

PLAYERS

NEUTRAL

Learn about your players. Ask if they like/love games. If yes, why and what type. If not, why. Consider these answers in your design choices.

5

PLAYERS

DON'T LIKE/HATE

Learn about your players. Ask why they don't like/hate games. What type, what history. Consider these answers in your design choices.

5

PLAYER BEHAVIOUR

?

How do you want the players to behave during the game?

6

PLAYER BEHAVIOUR

COMPETING

6

PLAYER BEHAVIOUR

COLLABORATING

6

PLAYER BEHAVIOUR

TAKING RISKS

6

PLAYER BEHAVIOUR

DEFINING STRATEGIES

6

PLAYER BEHAVIOUR

LAUGHING

6

**PLAYER
BEHAVIOUR**

COMPETING

Player against each other, solo or in teams. Players get competitive when winning prizes are involved. Take care: chance of cheating and aggressive gameplay.

6

**PLAYER
BEHAVIOUR**

This behaviour is in part a consequence of game design choices, the actions and rules of the game and interplay with other players. Test always. Beware, players can and will behave unpredictable.

6

**PLAYER
BEHAVIOUR**

TAKING RISKS

Reward risk taking behaviour with more points or bigger prizes. Provide exciting and safe gameplay choices with different rewards. The higher the risk, the higher the reward.

6

**PLAYER
BEHAVIOUR**

COLLABORATING

Provide players with tasks and choices where they need to collaborate. Different roles or different skills, or have the goal to be to big or difficult for just one person.

6

**PLAYER
BEHAVIOUR**

LAUGHING

Social games where players need to do silly or embarrassing things, use of humor in texts, over the top artwork, it all helps to get your players to laugh.

6

**PLAYER
BEHAVIOUR**

**DEFINING
STRATEGIES**

There need to be different ways to reach the goal. Give options and think of interesting ways the game goal is reached.

6

PLAYER BEHAVIOUR

DISCUSSING

6

PLAYER BEHAVIOUR

THINKING

6

PLAYER BEHAVIOUR

DECISION MAKING

6

PLAYER BEHAVIOUR

CHEATING

6

PLAYER BEHAVIOUR

HELPING

6

PLAYER BEHAVIOUR

BETRAYING

6

**PLAYER
BEHAVIOUR**

THINKING

Get players to think about their actions, strategies or subject of the game. Some players can take very long to come to a decision.

6

**PLAYER
BEHAVIOUR**

DISCUSSING

Can be enhanced by asking the players open questions or letting them function in different roles where they have to work together to get to the game goal.

6

**PLAYER
BEHAVIOUR**

CHEATING

This happens automatically if the rules are unclear or if the players think they can get away with it: stealing game materials (money) if nobody is looking or neglecting bad outcomes in cooperative game, it happens. A lot.

6

**PLAYER
BEHAVIOUR**

DECISION MAKING

The more options and choices a game offers, the more players will make decisions.

6

**PLAYER
BEHAVIOUR**

BETRAYING

Hidden goals, secret information, no need to show cards, it all helps to get players to betray each other. Beware: players can take this personally.

6

**PLAYER
BEHAVIOUR**

HELPING

If there is a role specifically tasked with helping others, it signals that helping is needed and necessary to reach the end of the game and win as a team.

6

GAME GOALS



The goals of the game. Players want to know: when do I win or lose this game? And how?

7

GAME GOALS

BE FIRST

Be the first to reach the goal, get the allocated amount of points before the end of the game, reach the end of the story, get over the finish line. Just be first.

7

GAME GOALS

SOLVE THE PUZZLE

Solve the puzzle(s), the smaller puzzles that are part of the game or the big endgame puzzle.

7

GAME GOALS

MOST POINTS

A very common way to win most boardgames. Can lead to point fixation by players where they only play for points and don't want to talk about anything else during the game.

7

GAME GOALS

BIGGEST AREA

Get more space for yourself or your team. A highly competitive type of game goal where players tend to go very far to win a bigger area than their neighbours.

7

GAME GOALS

(HIDDEN) MISSION

Complete one or more missions to complete the game. Missions can be shared by all players or be player/role specific, open and/or hidden.

7

GAME GOALS

BE FIRST

7

GAME GOALS

Different goals make different player behaviour. Be the first? Players will be competitive. Win together? They will collaborate.

7

GAME GOALS

GET THE MOST POINTS

7

GAME GOALS

SOLVE THE PUZZLE

7

GAME GOALS

COMPLETE A (HIDDEN) MISSION

7

GAME GOALS

CONTROL BIGGEST AREA

7

GAME GOALS

LAST PERSON

When all players are eliminated and just one is left, the game ends. Players don't need to win, they just need to not lose.

7

GAME GOALS

CAPTURE

You and/or your team wins if you take that one specific thing from the other team: a flag, a queen, et cetera. Rouses very competitive and defensive behaviour in players.

7

GAME GOALS

FINISH A STORY

Reach the end of a story, or maybe even a series of stories in the form of a campaign. The story can be prewritten and existing, or thought up by the players themselves.

7

GAME GOALS

COLLECTION

Collect: sets of cards, dice, tiles. For some games this is the only goal (gotta catch 'em all), for other games this is a means to reach the end of the game: when collected enough of x type, the game ends.

7

GAME GOALS

(PRE-)LUCK

Throw dice, spin the wheel of fortune or draw a card. Then the player decides what to do with the outcome. e.g. Yahtzee.

7

GAME GOALS

MOST VOTES

Are you the Werewolf? Or the secret assassin? In social party games voting decides who wins or loses. By pointing fingers, thumbs up or down, voting chips, playing cards, et cetera.

7

GAME GOALS

**CAPTURE THE
FLAG**

7

GAME GOALS

**LAST PERSON
STANDING**

7

GAME GOALS

**BUILD A
COLLECTION**

7

GAME GOALS

**FINISH A
STORY**

7

GAME GOALS

**GET THE MOST
VOTES**

7

GAME GOALS

(PRE-)LUCK

7

FUN



What is fun about your game?

8

FUN

SENSATION

Players love your game because it is a pleasure for the senses: beautiful visuals, great sound design, fancy components, big boxes, artwork, explosions, etc.

8

FUN

CHALLENGE

Players love the challenges in the game. Overcoming obstacles, solving problems, finding answers to puzzles. Challenge is not the same as difficulty.

8

FUN

FANTASY

Players can live out their fantasy in the game. Be a soldier in a wargame or a manager of a soccer team. Be whatever you can imagine.

8

FUN

NARRATIVE

Players want to follow a narrative. This is all about the story. It can be a linear story, or a choose your own adventure type of storyline. People like to know what happens next.

8

FUN

EXPRESSION

Players can express themselves and/or their creativity. Find original solutions, play in ways that reflects their personality. Customise, create, be original.

8

FUN

**PLEASURE
FOR THE
SENSES**

8

FUN

Why do people want
to play your game?

8

FUN

FANTASY

8

FUN

CHALLENGE

8

FUN

EXPRESSION

8

FUN

NARRATIVE

8

FUN

PASSTIME

Players want to spend time in a different headspace. Quick puzzles or just mindless clicking on a screen, just to pass the time. Repeat the same actions, do easy tasks, zone out during gameplay.

8

FUN

DISCOVERY

Players want to find new things, new stories, new territory, new game mechanics, new anything. What happens when I do this? What will I find over there?

8

FUN

FELLOWSHIP

Players want to be part of a group of players and overcome challenges together. Be in a clan, invite friends, help each other out or solve puzzles together.

8

FUN

COMPETITION

Players want to compete against other players or the game with just one drive: to win! Winning is everything and players can go to extreme lengths to win. Including cheating.

8

FUN

ACTION

Players want fast-paced action, surprises, thrills, chaos, mayhem, explosions. They are in it for the excitement.

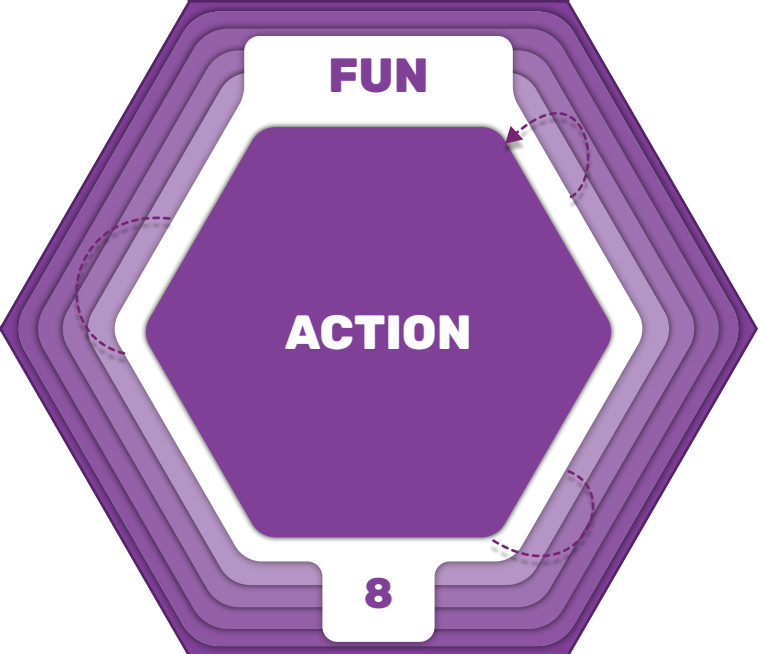
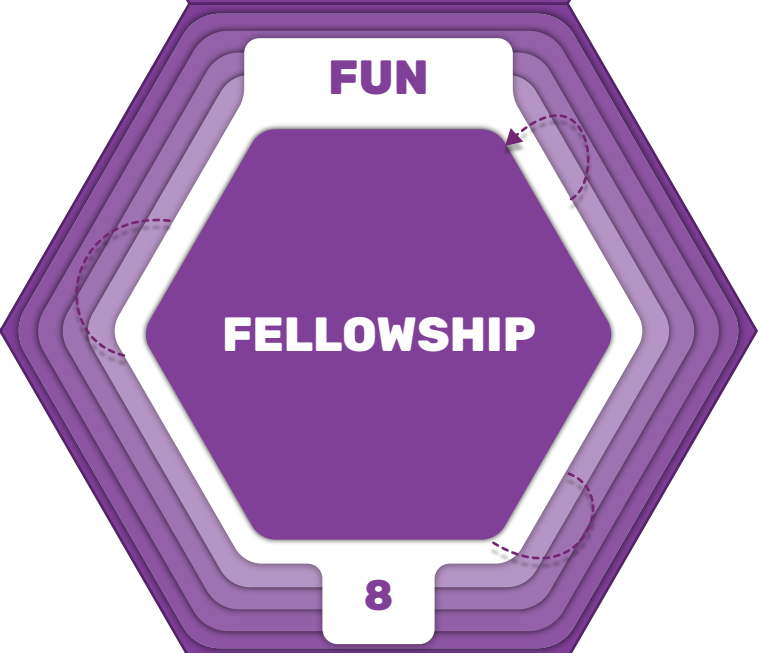
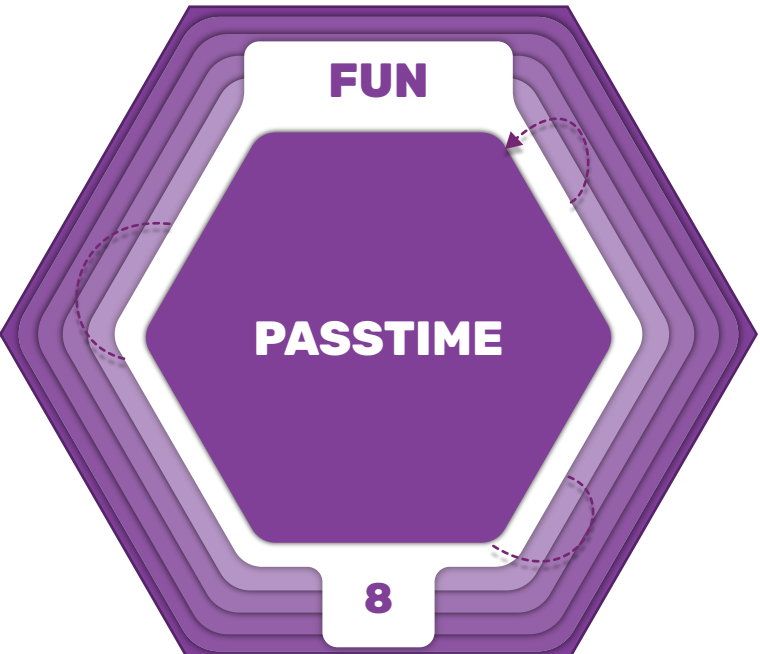
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FUN

ACHIEVEMENT

Players want more: to complete all the game has to offer or be the best, have the most powerful character or equipment.

8



RULES



What are the rules of your game? How can players reach the game goal?

9

RULES

YOU WIN IF...

9

RULES

YOU LOSE IF ...

9

RULES

THE GAME ENDS IF...

9

RULES

**A PLAYER TURN
CONSISTS OF...**

9

RULES

**FIRST PLAYER IS
DECIDED BY...**

9

RULES

HOW TO WIN

9

RULES

Rules create obstacles and constraints on gameplay, limitations on how the goal is achieved. It evokes creativity and strategic thinking. They should be clear for all and communicated up front.

9

RULES

HOW THE GAME ENDS

9

RULES

HOW TO LOSE

9

RULES

WHO IS FIRST?

9

RULES

A PLAYER TURN

9

RULES

**PLAYERS GET
FEEDBACK HOW...**

9

RULES

YOUR TURN ENDS IF...

9

RULES

CHEATING MEANS...

9

RULES

**YOU ARE (NOT)
ALLOWED TO...**

9

RULES

**PLAYER TURNS ARE
DECIDED BY...**

9

RULES

**THE END OF THE
GAME IS TRIGGERED
BY...**

9

RULES

**HOW TO END A
TURN**

9

RULES

**HOW TO GET
FEEDBACK**

9

RULES

**WHAT IS (NOT)
ALLOWED**

9

RULES

**WHAT IS
CHEATING**

9

RULES

**HOW DOES
THE GAME
END**

9

RULES

**HOW TO TAKE
TURNS**

9

ACTIONS

What can players DO in your game? What actions do they take to get closer to the game goal: rolling dice, playing cards, voting, building, etc.

10

ACTIONS

ROLLING DICE

Dice are used for luck and randomness. Dice come in different sizes: the classic D6 with 6 sides, D12 with 12 sides till a die with 100 sides. Using dice can add a bit of spice and excitement, but can also annoy players. Too much randomness can feel unfair, not enough can feel boring.

10

ACTIONS

PLAYING CARDS

Playing cards is one of the best known and oldest game mechanic. It is a genre in itself, like Poker & Bridge. Cards can be played in different ways. As actions: play one and take one or play one and do the action on the card. Or use them as assets like money.

10

ACTIONS

ROLL & MOVE

Roll a die, take a turn, make a move. A classic in older board games. Use sparingly when your players need familiarity. There are way more interesting ways to decide on turns or to move within the game.

10

ACTIONS

DRAFTING CARDS

Pass around a pack of cards and let players choose one. This pushes strategic thinking, forces players to make snap decisions while considering synergies with cards they already have and predict players strategies based on the absence of cards.

10

ACTIONS

BUY & SELL

Buying cards, streets, houses, energy, etc. Buying is one of the main ways to get resources in games. Often with game money but also with other resources: 2 wood for 1 boat or 3 sheep for 1 piece of cloth f.e. Selling is the opposite: trading resources for money or other resources.

10

ACTIONS

ROLL DICE

10

A blue hexagonal card with a white border. At the top, a white tab contains the word "ACTIONS" in blue. The center of the card is a dark blue hexagon with the text "ROLL DICE" in white. At the bottom, a white tab contains the number "10". Dashed lines with arrows show a circular path around the central text.

ACTIONS

?

Also known as
game mechanics

10

A blue hexagonal card with a white border. At the top, a white tab contains the word "ACTIONS" in blue. The center of the card is white with a large blue question mark. Below the question mark, the text "Also known as game mechanics" is written in blue. At the bottom, a white tab contains the number "10". Dashed lines with arrows show a circular path around the central text.

ACTIONS

ROLL & MOVE

10

A blue hexagonal card with a white border. At the top, a white tab contains the word "ACTIONS" in blue. The center of the card is a dark blue hexagon with the text "ROLL & MOVE" in white. At the bottom, a white tab contains the number "10". Dashed lines with arrows show a circular path around the central text.

ACTIONS

PLAY CARDS

10

A blue hexagonal card with a white border. At the top, a white tab contains the word "ACTIONS" in blue. The center of the card is a dark blue hexagon with the text "PLAY CARDS" in white. At the bottom, a white tab contains the number "10". Dashed lines with arrows show a circular path around the central text.

ACTIONS

BUY & SELL

10

A blue hexagonal card with a white border. At the top, a white tab contains the word "ACTIONS" in blue. The center of the card is a dark blue hexagon with the text "BUY & SELL" in white. At the bottom, a white tab contains the number "10". Dashed lines with arrows show a circular path around the central text.

ACTIONS

DRAFT CARDS

10

A blue hexagonal card with a white border. At the top, a white tab contains the word "ACTIONS" in blue. The center of the card is a dark blue hexagon with the text "DRAFT CARDS" in white. At the bottom, a white tab contains the number "10". Dashed lines with arrows show a circular path around the central text.

ACTIONS

BUILD

Use resources to build stuff in games: houses, villages, roads, engines, etc. The stuff you build will help in getting more or specialised resources, thus creating a fulfilling and oftentimes addictive gameplay loop: collect resources, build, collect new resources to build more.

10

ACTIONS

NEGOTIATE

Creates a social component. Get other players to give you stuff for cheap or fair prices - up to you and your group of players. Some players love the knives are out type of negotiating, but beware, not everyone is comfortable with this social dimension. Game grudges can bleed over in real life.

10

ACTIONS

WORKER PLACEMENT

Place a meeple/pawn or token on a board and do the action it describes. Requires planning and strategic thinking. Some actions are only available for 1 player, some for more.

10

ACTIONS

PHYSICAL ACTION

Jump, move, run, sing, improvise, throw, stand on 1 leg, kiss, drink, et cetera. Dexterity games are won by those who do these actions the best. Social games consist of a lot of (mostly embarrassing) things to do to win.

10

ACTIONS

VOTE

Vote anonymous or openly on an outcome. In a game like Werewolves this can be hilarious and somewhat mean when all people vote that you are the werewolf. Anonymous voting can give players a means to express their unbiased by others opinion.

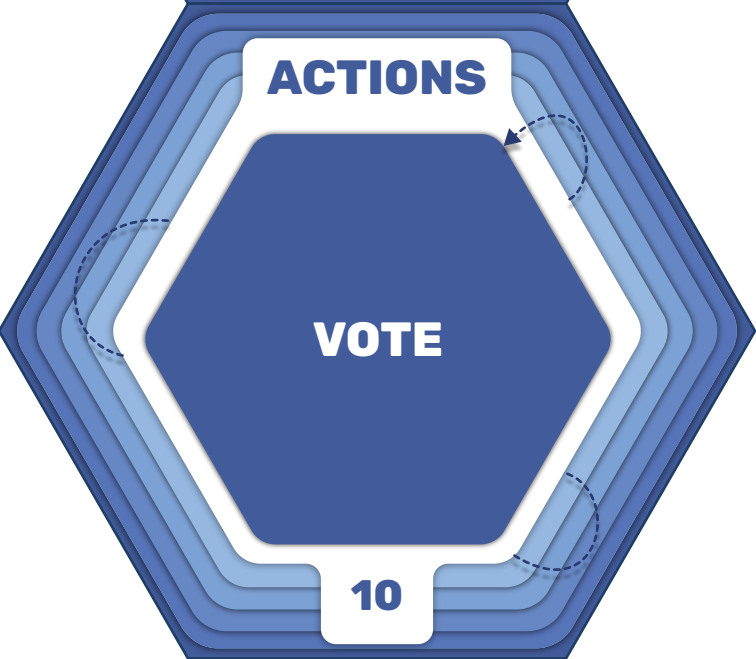
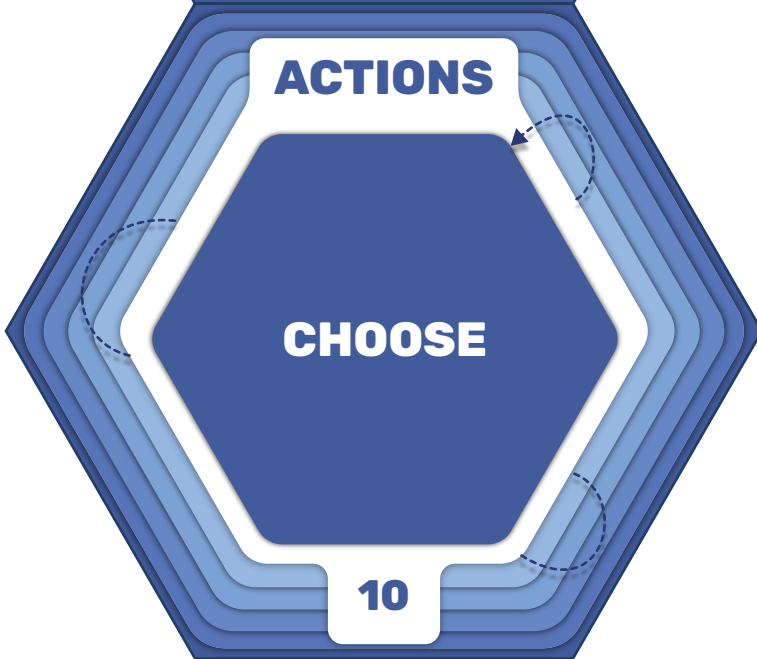
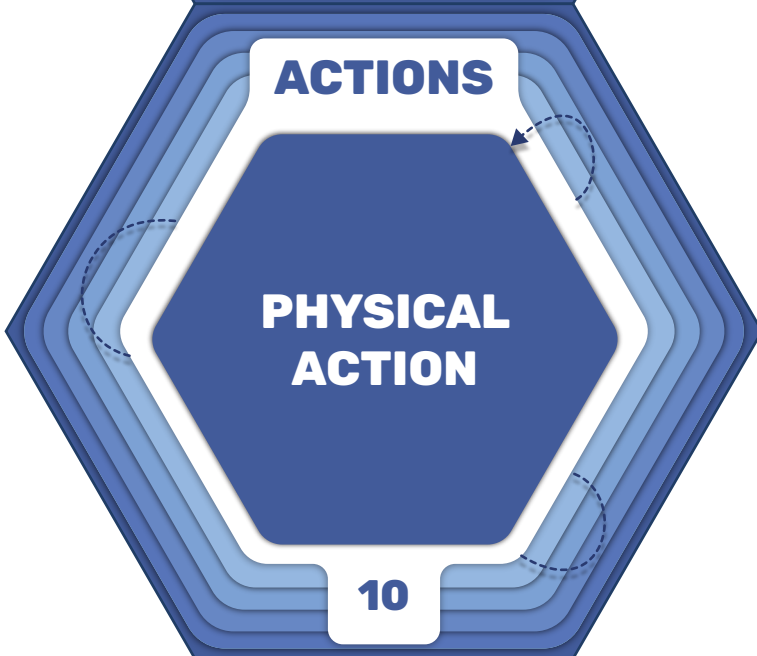
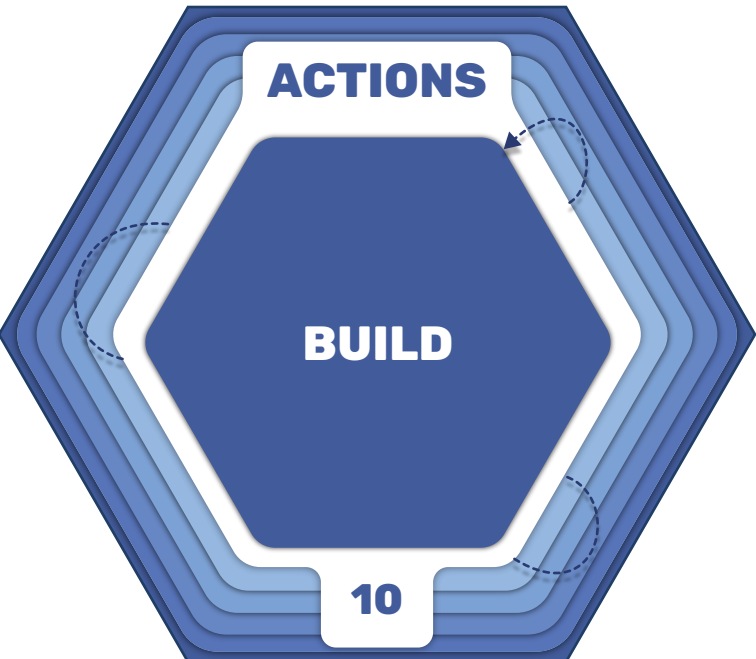
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ACTIONS

CHOOSE

Choose between cards, players, outcomes, items, resources or actions. The choices can be dictated by cards, a story book or other players.

10



COMPONENTS

?

The stuff in the game: dice, cards, tokens, game board(s), miniatures.

11

COMPONENTS

RULEBOOK

11

COMPONENTS

CARDS

11

COMPONENTS

BOARD(S)

11

COMPONENTS

DICE

11

COMPONENTS

PEN&PAPER

11

COMPONENTS

RULEBOOK

For all explanations necessary to understand the game. Should be easy to read with lots of visual aids to help players. Short and sweet, but complete.

11

COMPONENTS

A huge part of the fun of games, and the nicer/better quality, the better. Players tend to feel that beauty equals fun gameplay and are more willing to play.

11

COMPONENTS

BOARD(S)

Big board in the middle, smaller player boards, lots of boards. A board is the place to do the actions, read info or collect stuff from the game like cards/tokens/meeples/resources.

11

COMPONENTS

CARDS

Story cards, action cards, character cards, money cards, event cards, you name it. Anything can be made into a card.

11

COMPONENTS

PEN&PAPER

For players to use to make notes, run calculations, keep score, write out stories.

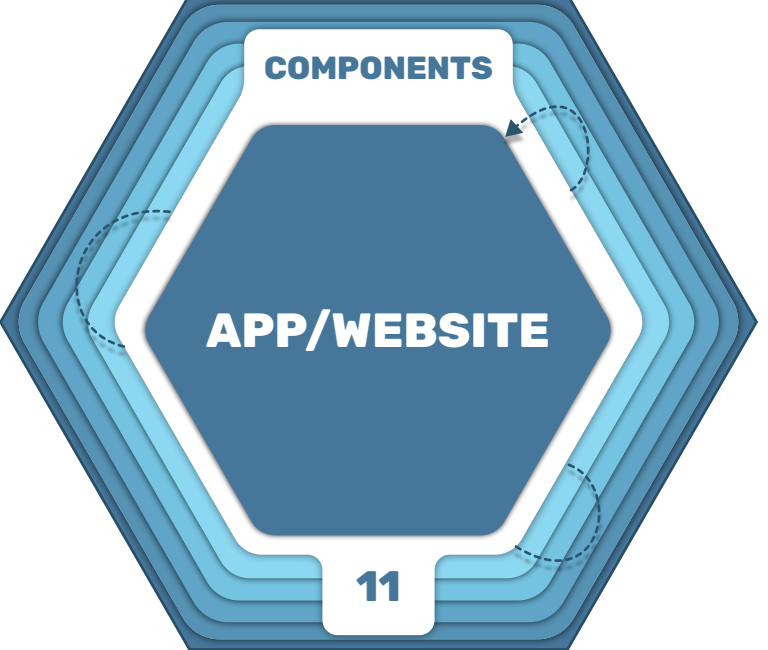
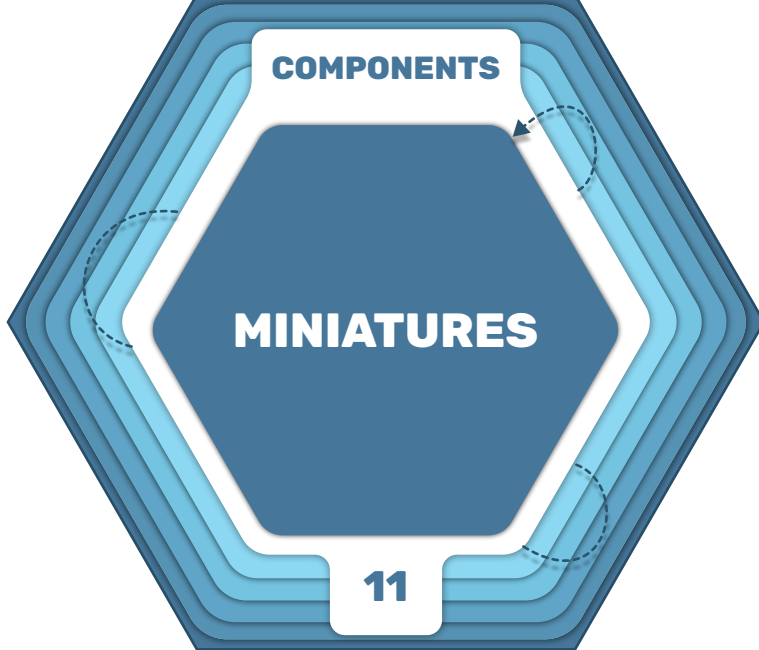
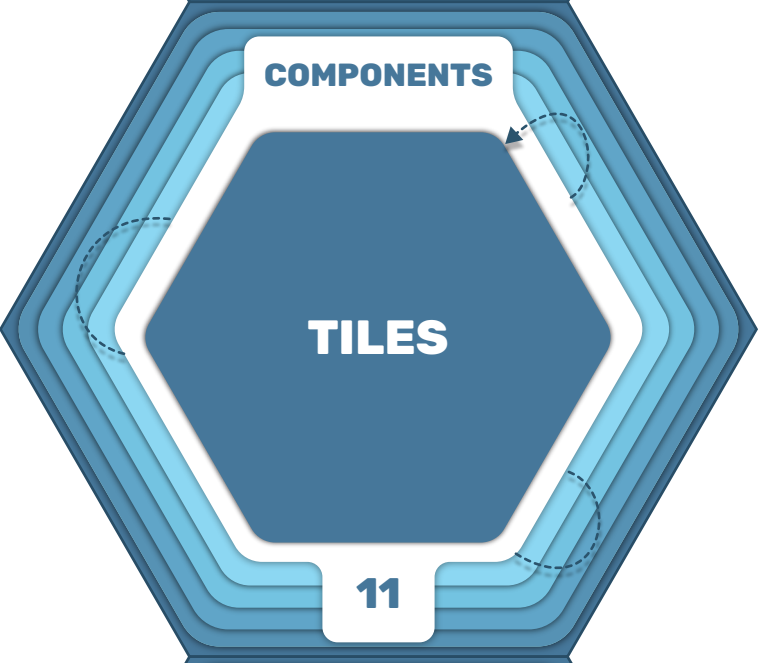
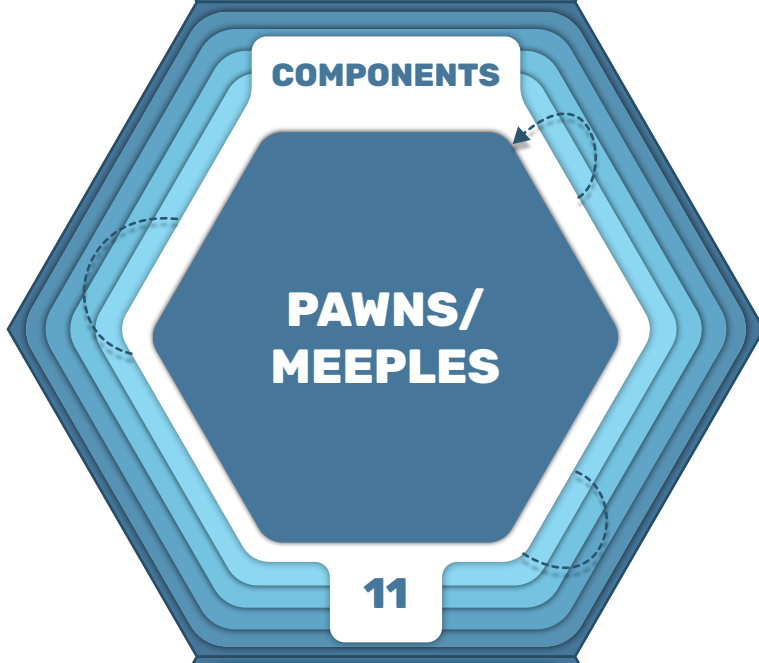
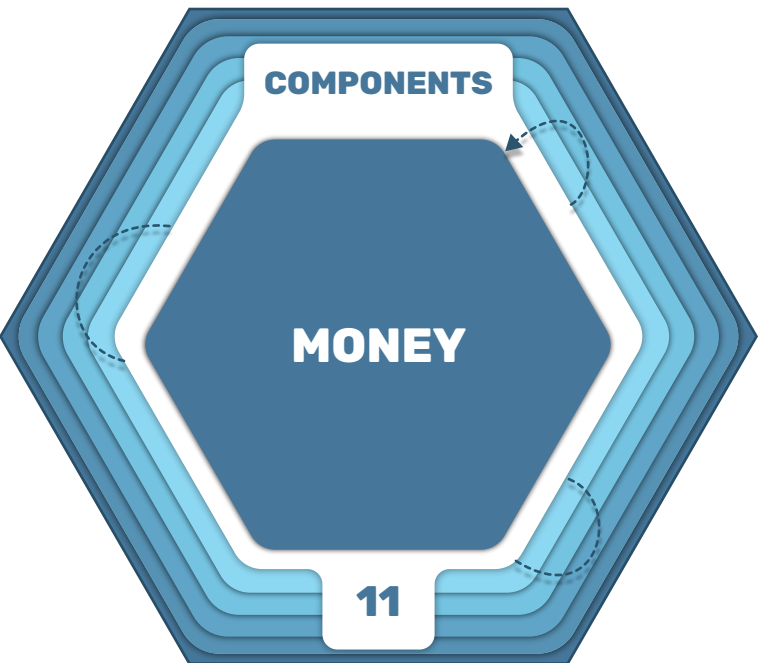
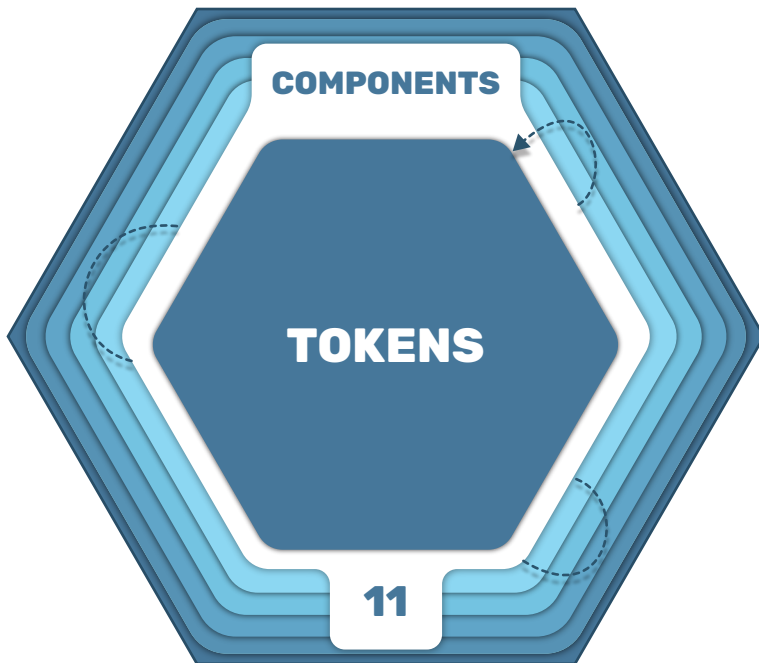
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COMPONENTS

DICE

Dice come in all sorts: with 4, 6, 8, 10, 12 and 20 sides, with custom sides of even blank. Brings the element of luck and surprise in the game.

11



COMPONENTS

MONEY

Paper money, card money of money in the form of tokens: it's all needed to buy & sell stuff in games, or to measure points and be a winning condition.

11

COMPONENTS

TOKENS

Tokens are used to keep track on a scoring track, count as resources of used to keep track of actions. Come in all kinds of flavours, sorts and colours. From animal or vegetal tokens to just plain wooden cubes.

11

COMPONENTS

TILES

Tiles can form a modular game-board like in Catan, or be placed as an action as in Carcassonne. Can be parts of buildings (or space ships) or a complete meadow. Very versatile.

11

COMPONENTS

PAWNS/ MEEPLES

Are owned by players and come in colours and types. Are used for actions or are place keepers on scoring tracks. Meeple means My People and are original from the game Carcassonne.

11

COMPONENTS

APP/WEBSITE

For storytelling, keeping score, helping with setting up, new campaigns, new challenges, music and input for puzzles and choices.

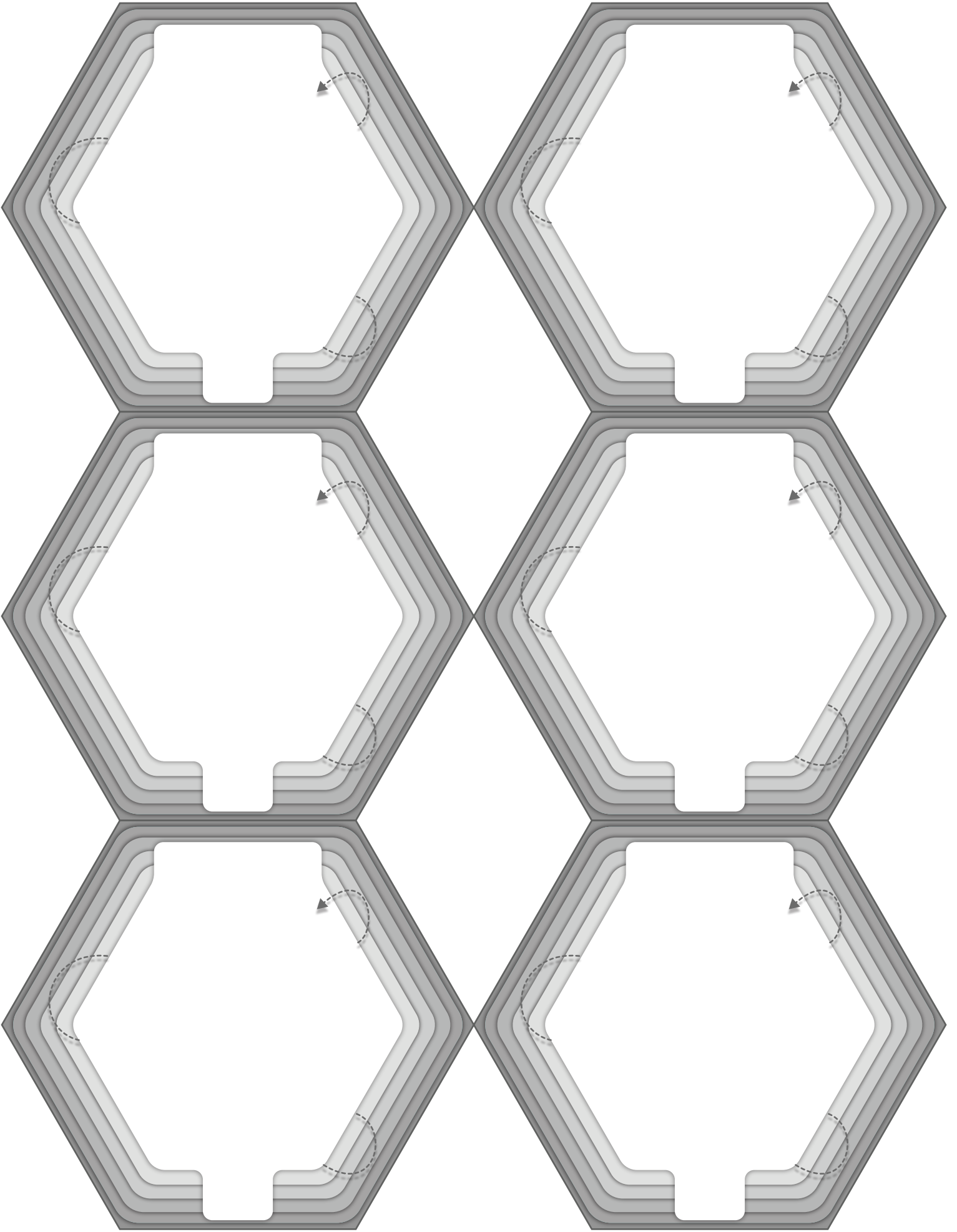
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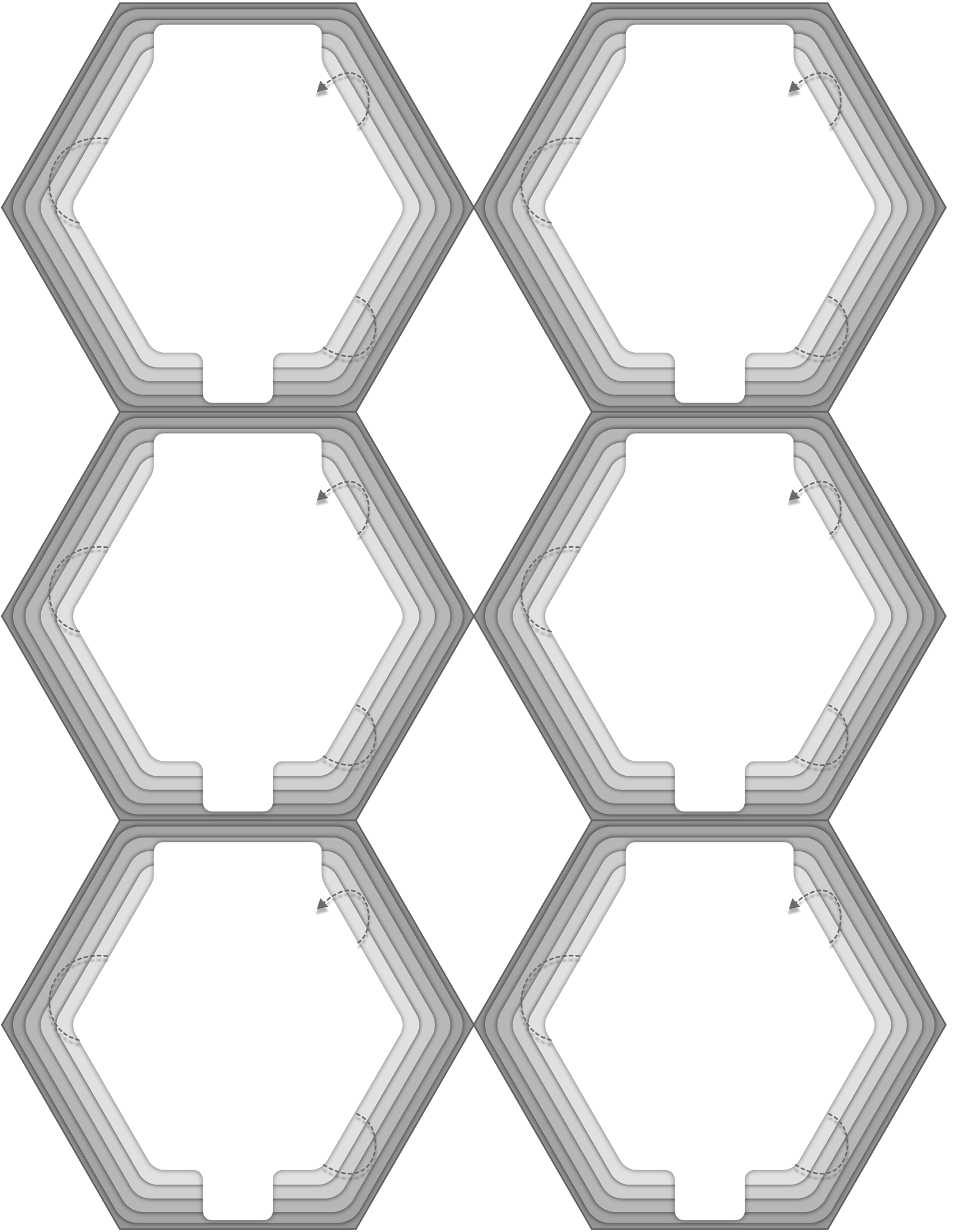
COMPONENTS

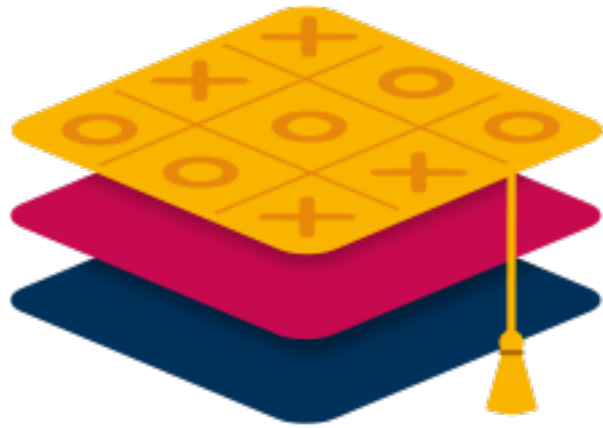
MINIATURES

Little characters, sometimes quite realistic, sometimes painted. To represent players or playable characters in a game. Mostly found in Dungeon & dragons-type of games.

11







**TEACHING
BY GAMING**

CARDS

DEFINE

WHAT IS A GAME?

You are going to design a game! But, have you ever thought about what a game is, exactly?

Think about this a few minutes and then make a list about everything that makes a game a game.

1A

DEFINE

LOVING IT, BUT WHY?

Take an often played favourite game and discuss what the game means to you.

What is it that you like?

What not?

Does it offer inspiration?

2A

DEFINE

ANALYSE THIS (1)

Pick a well-known game like Snakes and ladders, Risk or Monopoly.

Take the following Tile Categories:

Fun, Actions, Rules, Player Behaviour.

Try to find the tiles from these categories that match with the game.

3A

DESIGN

MAKE IT BETTER (1)

Take one of your beloved/hated games. After analysing it with help from the tiles, define which element of the game needs to change. Make new rules, change actions, insert new or other components. Keep the game mostly the same, but make it better.

4A

DEFINE

HATING IT, BUT WHY?

Take an often played but hated game and discuss what the game means to you. What is it that you hate? How come? How does the game make you feel?

2B

DEFINE

A GAME:

- ▶ has a **goal**, a specific outcome that the players want to achieve; gives players a sense of purpose
- ▶ has **rules**, limitations on the way in which the goal is achieved; evokes creativity and strategic thinking
- ▶ has a **feedback system**: shows players how close they are to their goal; is a promise the goal is achievable and motivates them to keep playing
- ▶ (mostly) **voluntary participation**: all players knowingly accept the rules, goals and feedback

1B

DRAFT

MAKE IT BETTER (2)

Make a prototype of your improved game. Find some friends and play both games: the existing game first, and then the new one. Observe their behaviour during gameplay. Talk with them about the existing game versus the new one. What are their thoughts about the old and new game? Did your changes work?

4B

DEFINE

ANALYSE THIS (2)

- ▶ **Fun**: what is the intended type of fun? Does it work?
- ▶ **Actions**: what type of actions can you take in the game?
- ▶ **Rules**: what are the rules? Are they fair? Fun? Clear?
- ▶ **Player behaviour**: how do players behave during gameplay? Which actions and rules have an impact on this behaviour?

3B

DESIGN

RACE YOU! (1)

Design a simple race game.
Use the Define & Design canvas.
Absolutes: max. 4 players and 2 rules.
The rest is up to you!
Think about: what makes this game fun and exiting?
Or maybe even stressful?

5A

DEFINE

RANDOM (1)

Shuffle the tiles per category.
Pick one tile from each category and lay them in a grid. Discuss the tiles and come up with ideas for a game.

6A

DESIGN / DRAFT

SUBJECTS & THEMES! (1)

First, pick one of these subjects:
Enhance creativity/Better teamwork/Silly fun with strangers/ Senior dating/Climate Change awareness/Learning biology/Racing in space/Trading in the Mediterranean/Communicating over generations.
Chosen? Turn the card around.

7A

DEFINE

LAUGHING (1)

Take the player behaviour tile: laughing.
Try to find tiles in the other categories that help in reaching this goal.
Discuss with others. Which tiles help? Which don't?

8A

DESIGN / DRAFT

RANDOM (2)

Design a game using the tiles.
If one tile proves to be impossible, you may
exchange for a new random tile.
Play and test the game. Make changes, play
and test again.

6B

DRAFT

RACE YOU! (2)

Make a prototype of your racegame with help
from the Draft canvas.
Invite players and let them play. Observe
their behaviour and talk to them afterwards.
Did you succeed? Was it as fun as you
hoped?
If not, change an element and try again!

5B

DEFINE

DISCUSSING (2)

Take the player behaviour tile: discussing.
Try to find tiles in the other categories that
help in reaching this goal. Discuss with others.
Which tiles help? Which don't?

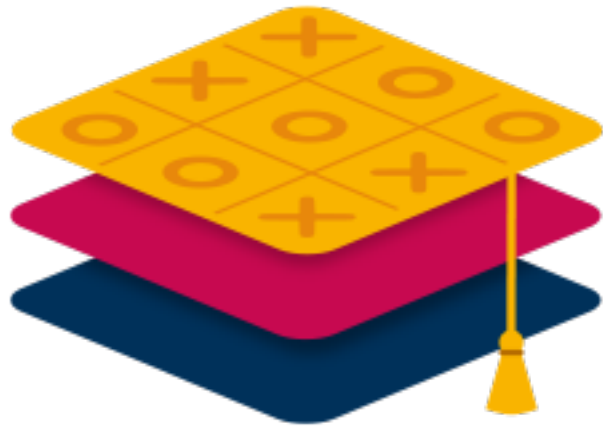
8B

DESIGN / DRAFT

SUBJECTS & THEMES! (2)

Pick one of these themes and combine this
with the subject of your choice.
Medieval times/
Horror/Comics/Court/Mystery/Film Noir/
Superheroes/Fantasy/Museum/Construction
Now make a game!

7B



**TEACHING
BY GAMING**

CANVAS

DEFINE

TAKE TILES 1 - 6

1

DESIRED OUTCOMES

Write down the outcome you want to achieve with your game. Choose tiles that help or make your own.

2

ABSOLUTES

Write down the mandatory stuff in your game. Choose tiles or make your own.

3

FREEDOMS

Write down everything that is free for you to design. Choose tiles or make your own.

DESIGN

TAKE TILES 7 - 11

4

FUN

Write down what makes this game fun for the players. Choose tiles or make your own.

5

GAME GOALS & RULES

Write down the goals of the game and try to capture these in rules. Choose tiles or make your own.

6

ACTIONS & COMPONENTS

Write down the actions players can take within the rules. Make a list of components. Choose tiles or make your own.

DRAFT

TAKE YOUR TILES

7

BUILDING BLOCKS OF YOUR GAME

Lay down all the tiles (existing and/or newly made) for the game. Have a good look. What is missing? Is it complete?

8

PROTOTYPING YOUR GAME

Make a paper prototype of your game: make cards, game board(s), tokens, write down the rules and make it as complete as possible.

9

PLAYING YOUR PROTOTYPE

Find players and play your game.

10

OBSERVE & LEARN

Watch the players play your game: what do you see? What do you hear? How are they behaving?

11

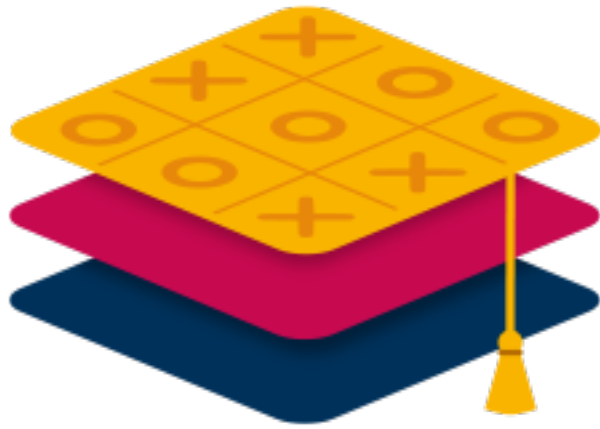
GET FEEDBACK

Take the starting tiles from each category. Ask questions about every tile.

12

ITERATING YOUR PROTOTYPE

Make changes based on the outcome of your playtest. Play and iterate again and again till you are satisfied with the final result!

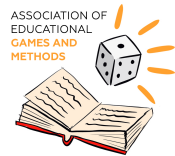
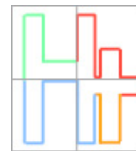


TEACHING BY GAMING

Colofon

This toolkit is designed by:

GAMES & LEARNING



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