



INTRODUCTION

Explore the lives and minds of Alexander Graham Bell, Karl Benz, the Wright brothers and other pioneers of invention and experience the thrill of the industrial revolution. Be there when the cash register, the sewing machine, the typewriter, the telephone, the gramophone, the camera, the car, the steam engine and the plane are all invented again in Era of Inventions. This time you will be the inventor, who creates, patents and introduces these inventions to the markets and the world! In the late 19th and early 20th century, these inventions were all made in a certain order. In Era of Inventions, however, you're the one who determines the order of the inventions. Race your competitors to invent as much as possible, or to speed through the production process. But don't forget to register your patents. Otherwise you may lose influence in the industry.

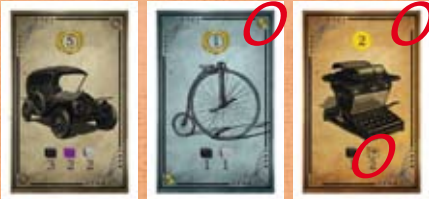
THE GOAL OF THE GAME

The goal of Era of Inventions is to gain as much influence in the industrial revolution as possible. To gain influence points, you must invent, patent and produce these products over the course of the game, as you try to become the most successful inventor of the industrial revolution!

Contents:

- 15 Action Tokens in player colours (3 for each player); 
- 20 Black Bonus Action Tokens; 
- 75 Invention Markers (15 in each colour); 
- 5 Patent Markers (1 in each colour); 
- 5 Player Pawns (1 for each player) 
- 27 Invention cards; 
- 12 Start-Invention cards 
- 29 Factory cards; 
- 40 Gold coins; 
- 20 Tool Cubes (white), 20 Technology Cubes (purple) and 20 Metal Cubes (grey) 15 small (value 1) and 5 large (value 3) of all types; 
- 22 Coal Cubes (black) and 22 Wood Cubes (blank) 15 small (value 1) and 7 large (value 3) of both types; 
- 20 Development Cogs (Blue Octagonal) 15 small (value 1) and 5 large (value 3); 
- 1 Black Round Marker; 
- 1 Black Start Player Pawn; 
- 1 Game Board and Game Rules

The Invention cards



Above: Examples of invention cards: (From left to right) original invention; start invention, (S in the corner); and fake invention (question mark on the cubes and in the corner).



Left: Invention card back

The Factory Cards



Top: Factory card and card back. Bottom: Start factory card and card backs in 5 colours.

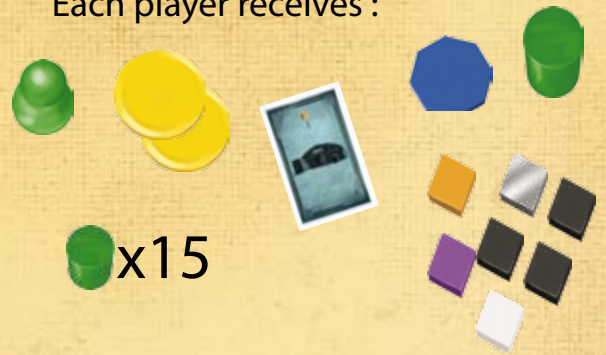


SETUP

1. Put the game board in the middle of the table.
2. Each player receives the action tokens in his colour. In a 4 or 5-player game, each player receives 2 action tokens; in a 3-player game each player receives 3 action tokens.
3. Each player receives: 2 gold coins, 1 wood cube, 1 metal cube, 1 technology cube, 1 tool cube, 3 coal cubes and 1 development cog.
4. Each player receives: 3 bonus action tokens (in a 3-player game), 5 bonus action tokens (in a 4-player game) or 1 bonus action token (in a 5-player game).
5. Each player receives 15 invention markers in his own colour.
6. Each player receives 1 patent marker and places it at the bottom of the patent track.
7. Each player receives the factory card in his colour. This factory produces 1 wood.



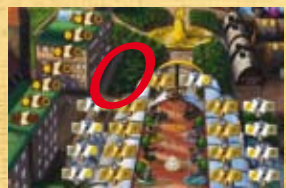
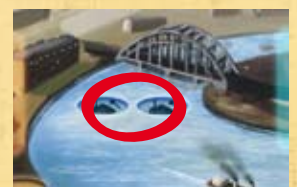
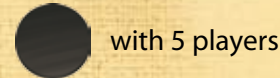
Each player receives :



x15



+



The six action areas and action token spaces.

8. Shuffle the remaining factory cards and put 5 cards face-up on the designated spaces on the game board. Place the cards from left to right on the 5 spaces. The remaining cards are placed in a stack, face-down next to the game board.
9. Shuffle 12 start-invention cards and put 7 cards face-up on the designated spaces on the game board. Place the first three cards from right to left on the lower row and the other four cards from left to right on the upper row. The remaining cards are placed in a stack, face-down next to the game board.
10. Sort the 27 invention cards and place them in a pile, face-up next to the game board.
11. Put 3 coal cubes on each of the coal storage houses and 2 of the correct resource type on each of the ships and the remaining storage houses, as indicated on the ships and houses.
12. Place the black round marker on space 1 of the round track.
13. Place the players' pawns on 0 (the start square) of the influence track.
14. Choose a start player and give them the black start player pawn.

GAME PLAY

A round consists of two parts:

- The players place their action tokens.
- The action areas are resolved in order.

PLACING THE ACTION TOKENS

Starting with the first player and moving clockwise, each player places one of his tokens on 1 of the 6 action areas. After all players have placed their first action token, they each place a second token on another action area, again starting with the first player.

Note: For a 3-player game each player has three action tokens so a third placement round occurs.

When placing action tokens, the following rules apply:

1. No more than two action tokens may be placed on any one area.
2. Players may have no more than one of their action tokens on any action area.

RESOLVING THE ACTION AREAS

The first player is the first to resolve an action. He chooses one of his action tokens and takes the appropriate action. He may choose either of his action tokens; he does not have to resolve them in the order they were placed.

After the first player has resolved his action, he takes his action token off the game board and places it back into his stock. The other players then each resolve one action (in clockwise order) during which the same rules apply. After all players have taken their first actions, the second actions (and then third in a 3-player game) are resolved in the same way.

Once all players have taken their actions the round ends. Then preparations for a new round are made (see later in the rules).

Note: Players may choose not to resolve their action. They are free to withdraw their action token, but also forfeit their profits from that particular action area.

There are 6 different action areas in Era of Inventions, explained in order below. When resolving an action, only the player whose turn it is takes the action associated with the area.

ACTION AREA ONE: BUILD FACTORIES

This action area allows players to build factories. The players are free to choose from the factory cards that are placed on the game board. At the bottom of each card, the cost to build each factory is displayed (in wood and/or coal). At the top of each card, the factory's profits are shown. A player receives these profits when he uses the action area 'factory production' (see below).

Players may build up to 3 factories per round.

A round consists of two parts:

- The players place their action tokens.
- The action areas are resolved in order.

Starting with the first player, players place 1 action token on 1 of the 6 action areas.

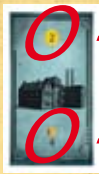


Left: rule 1 and Right: rule 2

Starting with the first player, players choose one of their placed action tokens, and resolve the appropriate action.



Build a maximum of 3 factory cards. The cost is on the bottom of the card.



Profit

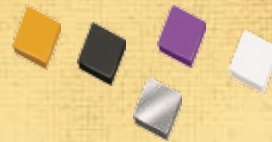
Cost to build

The Factory Cards

Note: The player who builds this factory card immediately receives 1 influence point.



Resources:



ACTION AREA TWO: FACTORY PRODUCTION

This action area allows players to use their factories to produce resources (in cubes), gold coins, or development cogs. Other players' factories do not produce at this time. The top of the factory card shows what each factory produces. Resources produced are taken from the general supply and added to the player's personal stock.



Each factory owned produces the items shown on the top of the factory card.

ACTION AREA THREE: BUY RESOURCES

This action area allows players to purchase the resources from 1, 2, or 3 ships and/or storage houses for the cost of 1, 2, or 3 gold coins, respectively. The gold coins are paid to the general supply. The player then puts any purchased commodity cubes into his personal stock. A player may not buy more than 3 ships'/storage houses' resources.



Buy for 1,2 or 3 gold coins 1, 2 or 3 loads of resource cubes.

ACTION AREA FOUR: PRODUCE INVENTIONS

This action area allows players to produce inventions that have already been invented. The active player chooses 1 or more invention cards. He pays the cost(s), shown on the bottom of each card in resource cubes, to the general supply. Some invention cards have a question mark on the bottom of the card instead of a cost in cubes. ***For these cards refer to the explanation of the action area "Develop Inventions or Register Patents".

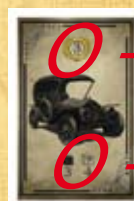


Buy a maximum of 3 invention cards for the cost shown at the bottom of each card. The profit is shown at the top of the card.

The player then receives profits from his production. The top of each invention card shows the profit (which may be gold coins, development cogs or influence points). If the profit consists of gold coins or development cogs, these are taken from the general supply and put in the personal stock of the player. If the profit is in influence points, the player moves his token ahead on the influence point track.

Place the purchased invention cards on the discard pile.

Note: The player cannot produce an invention if he cannot pay the cost shown on the invention card. A player may only produce up to 3 inventions in one action. After a player takes this action, the inventions produced are placed in the discard pile. Any other player who placed his token on this action area cannot retrieve and/or produce discarded inventions.



Profit

Cost to build

ACTION AREA FIVE: EXCHANGE MARKET

This action allows players to choose one of two actions:

- (a) Receive one development cog, or
- (b) Perform up to 5 actions at the exchange market.

(a) The active player may take a development cog out of the general supply and put it in his personal stock. His turn is then over.

(b) The active player may choose up to five actions at the exchange market. The available actions are:

Upper square	Exchange 2 gold coins for 1 development cog or vice versa;
Middle square	Exchange 2 gold coins or 1 development cog for 1 influence point;
Lower square	Exchange 2 resource cubes and/or gold coins for 1 (other) resource cube or 1 gold coin. Note: development points cannot be exchanged. OR purchase a black bonus disc for 2 gold coins (the purpose of these discs is explained later).

A player may not perform more than 5 exchanges on the exchange market, and no more than 3 from each square.

Note: A player may make less than 5 exchanges in this action area if he wishes.

Example:

The orange player has used the upper square 3 times (the square limit) to exchange 2 gold coins for 1 development cog. The orange player then exchanges 2 metal cubes for 1 tool cube in the lower square. Finally, he exchanges 2 coal cubes for 1 wood cube (lower square). Orange has now reached the limit of 5 exchanges. He has not made more than 3 exchanges per square.

ACTION AREA SIX: DEVELOP INVENTIONS OR REGISTER PATENTS

This action allows players to either develop inventions or register patents. The players must choose between the two actions; they may not do both on the same turn. Players use development cogs to develop their inventions, and gold coins to register/purchase patents. These actions are further explained below.

Develop Inventions.

The player may develop any of the 9 inventions displayed on the board and introduce them to the market. Each invention has two spaces for its development: one gold space and one silver space. Every space has three numbers and a patent symbol.



Two possible actions:

(A) receive 1 development point, or
(B) perform up to 5 actions at the exchange market.

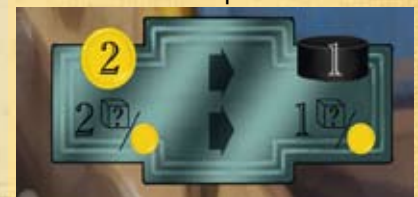
Note: maximum 3 exchange actions per square



Upper Square



Middle Square



Lower Square



Two possible actions:

(A) develop inventions

The gold spaces are for when an original invention is developed. The silver spaces are used when an original invention is developed further: technical invention.

If the active player chooses to develop an invention, he is free to choose any invention he wishes. It is not necessary to begin with the cheapest invention. The player must pay the specified number of development cogs for the invention they choose. If they have no development cogs, or not enough, they may not choose to develop that invention.

Players must first choose only from the original inventions (the gold spaces). Only once an original invention has been developed can the player choose to further develop it: technical invention (the silver space). The same player may, however, develop the original invention AND the technical invention.

When a player introduces a specific invention to the market, he places an invention marker in his colour on the number that is on the left hand side of the space for that invention. Then he pays the number of development cogs indicated by the number at the top of the invention space. These development cogs go to the general supply.

Note: A player may not spend more than 7 development cogs in 1 action.

On both the gold and silver spaces, the cost of each invention, in development cogs, is indicated in blue. On the left hand side of each space, the influence points a player receives when he develops each invention is indicated. On the right hand side, the influence points or gold coins a player receives when another player produces this invention is indicated, (see the action area "Produce Inventions").

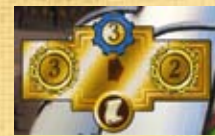
Note: If a player produces his own invention, he only receives the profits shown on the upper part of the invention card, (see action area: Produce Inventions) and not the influence points or the number of gold coins shown on the board on the invention spaces.

After a player has placed his invention marker on an original invention, he pays the indicated number of development cogs and receives the number of influence points on the influence track. The three cards of this invention must then be placed face up next to the pile of invention cards and will be added in at the end of the round. This invention will be available for production in the next round. (see below).

Note: No new cards are brought into the game for a technical invention. Only for original inventions.

Example:

Yellow has one development cog and brings the sewing machine on the market. He places his invention marker on the left hand number on the original invention (gold space), puts one development cog in the general supply and moves his pawn one square forward on the influence track. He takes the three cards with the sewing machine out of the pile of invention cards and puts them face up next to the pile of invention cards and the discard pile of invention cards next to the game board. At the end of the game round, these three cards will be shuffled into the deck of existing invention cards.




Original Invention

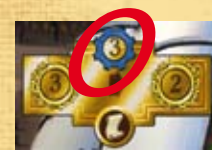


Technical Invention



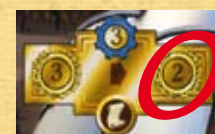
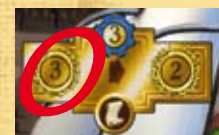
Placing the invention marker

Spend maximum of 7  per action



Cost

Profits from developing an invention



Profits when another player produces an invention.

Original invention: remove the 3 matching invention cards from the stack and put them face up next to the pile of invention cards.

On two of the three invention cards for each invention the cost to produce the invention is shown in resource cubes and/or gold coins. These cards are called the official cards.

***On the third invention card a question mark is shown at the bottom. This means that a player can decide which resources he uses to produce the invention. Note: Only metal cubes, technology cubes, tool cubes and the required quantity of coal cubes should be used here. This card is referred to as a fake card.

When an invention is produced, the player who developed the original or technical invention only receives the indicated number of influence points or gold coins if the player producing the invention uses an official invention card. If another player uses a fake invention card (with a question mark), the player who developed the invention receives nothing.

Note: A player may not produce fake inventions which he has also developed. So, if his invention marker is on the original invention (gold) or technical invention (silver) space, he cannot produce them as fake inventions.

Same Example:

It is the beginning of a new round. There are two sewing machines cards to produce on the game board. One is an official card and the other a fake card. The green player has decided to produce both sewing machine cards. He pays the number of resource cubes shown at the bottom of these cards and receives the profits shown on top of the cards. Yellow receives one influence point for the official card, but for the fake card he receives nothing!

REGISTER PATENTS

If the active player does not wish to develop an invention, he may register patents. To keep from losing the profits of an invention because of fake products, a player can protect his inventions through patent registration. On the left side of the game board there is a patent track on which patents can be registered.

A player can use this action to register one or two patents. Each time he registers a patent he moves his marker one square up the patent track. He pays the number of gold coins shown on the new square. Then he immediately receives the corresponding amount of influence points on the influence track.

Example:

The brown player does not have any patents and wants to register his first patent. He pays a gold coin to the general supply, places his patent marker on the first square on the patent track and receives one point on the influence track. The orange player has also chosen this action and has no patents as well. Orange decides immediately to develop two patents. He pays 3 (i.e. 1 + 2) gold coins to the general supply, places his patent marker on the second patent square on the patent track and immediately receives 2 influence points on the influence track.

Invention cards with a question mark are called fake invention cards.

The player who developed the original or technical invention gets no reward when a fake card is used for production.

A player cannot use a fake card to carry out production of an invention developed by the same player.



Or (b) register patents

Pay the number of gold coins: move markers on both the patent track and the influence track.



If a player has registered a patent, he puts his invention marker on a patent circle, which is shown at the bottom of the invention that has been developed by this player. If the player has more inventions, he may choose to patent any of his inventions, whether original or technical. A player may not patent an invention developed by another player.

If a player has a patent on his invention, he receives influence points or gold coins for both official inventions and fake inventions when they are produced by other players. If he produces an official invention himself, he still receives nothing (except the profit from the production). And he may still not produce fake products of his own inventions.

Players may buy patents before they have developed any inventions. In this case a player pays the gold coins for the new square on the patent track, and then receives the influence points as normal, but cannot place an invention marker on a patent circle. If the same player later develops an invention, the previously purchased patent cannot be used to place an invention marker on the patent circle of the invention. The player must first make an invention and then buy and register a new patent.

Example:

The brown player places his invention marker at the patent circle (in the gold space) of the telephone he has invented. The orange player has just invented the typewriter. He places his invention marker at the patent circle (in the gold space) of this invention. He cannot place his second invention marker because he has no more inventions. He cannot use this patent for something he invents later.

Each player is limited to register 2 patents in this action. Throughout the game each player can register only up to 6 patents.

Same Example:

It has not been a wasted action for the orange player, because he received an additional influence point for buying a patent. Orange will now only be able to patent a maximum of 5 inventions during the game, as he has bought one patent without a corresponding invention.

THE BLACK BONUS ACTION TOKENS

A player may use a black bonus action token to make an additional action. The token can only be used, however, directly after a regular action has been taken. Therefore each player can use a maximum of 2 bonus action tokens each round (3 in a 3 player game). But only one after each regular action!

The following bonus actions can be performed when using a bonus token:

- produce 1 invention
- choose one factory to produce
- pay 1 gold coin to buy the resources of 1 ship or storage house
- perform 1 single action on the exchange market (players are not allowed to take 1 development cog)
- develop 1 invention
- register 1 patent
- build 1 factory





The green player registers an original patent.

Patented inventions give profits even when another player produces a fake invention.

Up to 2 patents per action. Max. 6 during game.

The black bonus token can be used only directly after a regular action has been taken.

Max. 2x  per round (4 / 5 players)

Max. 3x  per round (3 players)

Possible actions, see left.

Note: When using the bonus action token, the usual costs for each action must be paid. Once the player takes his bonus action, he returns the bonus action token to the general supply.

When a player purchases a bonus action token at the exchange market, for 2 gold coins, he may not take his bonus action immediately, but must wait until after his next regular action is completed.

Bonus action tokens can be purchased at the exchange market.

SYMBOLS ON THE INFLUENCE POINTS TRACK

Some squares of the influence track have symbols of resources or gold coins. If a player receives influence points during his action and his pawn ends on one of these squares, he immediately receives that resource, or gold coin. A player may receive more than 1 gold coin and/or resource during his action.



Each symbol on the influence track gives a bonus when a player lands on that square.

Example:

The orange player puts his action token on the action area 'Produce Inventions'. When he performs this action, he decides to produce 2 inventions: a telephone and a cash register. Orange first produces the telephone. He puts 5 resources (1 metal cube, 1 technology cube, 1 tool cube and 2 coal cubes) in the general supply and moves forward 3 squares on the influence track. His pawn ends on square 9, which has a symbol of a gold coin. Orange immediately takes 1 gold coin from the general supply. Orange takes the telephone invention card off the game board and puts this on the discard pile. Then he produces the cash register. He puts 3 resources (1 metal cube, 1 technology cube and 1 coal cube) in the general supply and now moves forward 2 squares on the influence track. His pawn now ends on square 11, which has a symbol of a wood cube. Orange immediately takes 1 wood cube. Orange takes the cash register invention off the game board and puts this on the discard pile. This is the end of his action.

Example 2:

The green player puts his action token on the action area 'Develop Inventions or register Patents'. In his action Green decides to register 2 patents. His first patent costs 1 gold coin and his second cost 2 gold coins. Green pays 1 gold coin and puts his patent marker on the first square of the patent track. Then he progresses 1 square on the influence points track. His pawn ends on square 6 which has a symbol for extra tools. Green immediately takes 1 tool cube. Green is able to patent 1 of his inventions. If he has an invention without a patent, he may place his invention marker on the patent circle of that invention. Green then pays 2 gold coins for his second patent and moves his patent marker one space forward on the patent track. He then moves forward 1 square on the influence points track. His pawn ends on square 7 which has a symbol for extra metal. Green immediately takes 1 metal cube. Green is allowed to patent 1 more of his inventions.

THE END OF A ROUND

A round ends after all players' actions have been taken, (or withdrawn). All action tokens are returned to the personal stocks of the players.

PREPARATIONS FOR A NEW GAME ROUND

- 1a. Remove ALL start invention cards which have not been produced from the game board. The start invention cards which have been produced and the start cards which are still in the face-down pile of cards, remain in the game;
- 1b. If there are invention cards on any of the 3 right hand spaces of the upper row put them in the discard pile next to the game board. Slide the other remaining invention cards in the same order to the right-hand side of the upper row;
- 1c. If new inventions have been developed: all invention cards (both discard deck and face-down deck) are shuffled. Do not shuffle the invention cards which remain on the game board. After shuffling the cards, place new cards on the game board so the total number of invention cards is again 7;
- 1d. If no new inventions have been developed: place new cards on the game board so the total number of invention cards is 7 again. If there are not sufficient cards in the face-down deck for new cards, shuffle both the deck of discarded cards and the deck of new cards;
2. Put any factory cards that are on the 3 right hand spaces, on to the discard pile next to the game board. Slide the remaining factory cards in the same order to the right-hand side. Fill up the empty spots with new factory cards from the face-down deck of new cards. If there are not sufficient cards in the face-down deck, shuffle both the deck of discarded cards and the deck of new cards;
3. Fill the steam ships and the storage houses. The ships and houses which have no resources receive 2 resource cubes, with exception of the storage houses with coal, which receive 3 cubes. All ships and storage houses with resources still remaining are refilled with 1 extra cube per ship/house.
4. Move the black round marker one space forward on the round track.
5. The previous start player passes the black start player pawn to the player on his left. This player is the start player in the next round and must place the first action disc.

GAME END

The game ends after the ninth round is completed (in a 3 player-game), after the eighth round (in a 4 player game) or after the tenth round (in a 5 playergame).

The round ends after all actions are resolved.



See paragraphs 1a and 1b.



See paragraphs 1c and 1d.



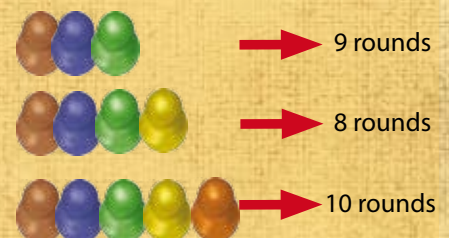
See paragraph 2.



see par. 3.



End of the game: after 8, 9 or 10 Rounds.



WINNING THE GAME

The total score of each player consists of (a) influence points which the player has gathered in the course of the game, (b) the turnovers of resources, gold coins and development cogs in the personal stocks of the players and (c) bonus points.

A : Influence Points

The number of influence points gained on the influence points track.

B : Turnover

At the end of the game all players may use the exchange market according to the rules in the action area "Exchange Market". One exception applies: players cannot buy a bonus action token.

Players can try to trade the commodities, gold coins and development cogs to gain influence points. Logically up to 3 influence points may be scored here (players may use the 2nd column 3 times, in which gold coins and development cogs can be exchanged for influence points).

C : Bonus Points

The bonus points are earned in the following ways:

1. The player who has finished highest on the patent track receives 5 influence points.
2. The player who has the most invested development cogs receives 5 influence points. To determine this, count the number of development cogs that are in blue on the top of the spaces for inventions that the player has invented. The number of inventions is not important.
3. The player who has the largest production capacity in his factories receives 5 influence points. Note: count the numbers on top of the factory cards. The number of factory cards is not important.

If there is a tie when applying the bonus points rules, please act as follows:

- * If there are 2 players who have the same number of points in 1 category, they both receive 3 influence points;
- * If there are 3 players who have the same number of points in 1 category, they all receive 2 influence points;
- * If there are 4 or 5 players who have the same number of points in 1 category, they all receive 1 influence point.

TIES

If, after all this, two players are tied for influence points, then the tied player who has developed the most inventions wins. If this is equal, they share the victory.

Quined Games thanks: Sander Bol, Marina Kortekaas, Leonie Caljouw, Malorie Laukat, Arnaud Urbon, Anke Hahn, Steve McKeogh, Jeroen Hollander and all test players. The author thanks: Arthur Tebbe, Sander Bol and the members of gaming club Tyche in Amsterdam.

Total score =

- a. points on the influence track +
- b. points in the exchange market +
- c. bonus points



Example (c) 1: Yellow and green are highest on the Patent track and both receive 3 influence points.



Example (c) 2: Green, has invested most in development and receives 5 influence points.



Example (c) 3: Green has a production capacity of 4.

In a tie the tied player with most inventions wins.

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