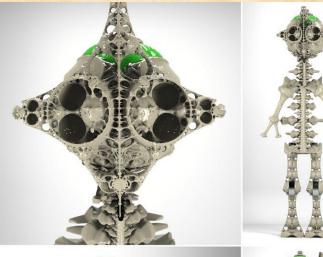
BLOOD, SWEAT, AND TEARS

Rules for Building your own Homunculus



BLOOD, SWEAT, AND TEARS

Rules for Building your own Homunulus





By: Will Mayer DM for www.d8nightpodcast.com

COPYRIGHT INFORMATION AND CREDITS:

DUNGEONS & DRAGONS, D&D, WIZARDS OF THE COAST, FORGOTTEN REALMS, THE DRAGON AMPERSAND, *PLAYER'S HANDBOOK, MONSTER MANUAL, DUNGEON MASTER'S GUIDE,* D&D ADVENTURERS LEAGUE, ALL OTHER WIZARDS OF THE COAST PRODUCT NAMES, AND THEIR RESPECTIVE LOGOS ARE TRADEMARKS OF WIZARDS OF THE COAST IN THE USA AND OTHER COUNTRIES. ALL CHARACTERS AND THEIR DISTINCTIVE LIKENESSES ARE PROPERTY OF WIZARDS OF THE COAST. THIS MATERIAL IS PROTECTED UNDER THE COPYRIGHT LAWS OF THE UNITED STATES OF AMERICA. ANY REPRODUCTION OR UNAUTHORIZED USE OF THE MATERIAL OR ARTWORK CONTAINED HEREIN IS PROHIBITED WITHOUT THE EXPRESS WRITTEN PERMISSION OF WIZARDS OF THE COAST.

©2016 WIZARDS OF THE COAST LLC, PO BOX 707, RENTON, WA 98057-0707, USA. MANUFACTURED BY HASBRO SA, RUE EMILE-BOÉCHAT 31, 2800 DELÉMONT, CH. REPRESENTED BY HASBRO EUROPE, 4 THE SQUARE, STOCKLEY PARK, UXBRIDGE, MIDDLESEX, UB11 1ET, UK.

D8 NIGHT PODCAST, KRINKLE FIRETOUCH, WYSDOM BEEZLEBECK, AND THE SIX HUMORS OF THE HOMUNCULUS ARE PROPERTY OF DOUGLEY GAMES AND ENTERTAINMENT LLC. THIS MATERIAL IS PROTECTED UNDER THE COPYRIGHT LAWS OF THE UNITED STATES OF AMERICA. ANY REPRODUCTION OR UNAUTHORIZED USE OF THE MATERIAL CONTAINED HEREIN CONCERNING THESE SPECIFIC ENTITIES IS PROHIBITED WITHOUT THE EXPRESS WRITTEN PERMISSION FROM DOUGLEY GAMES AND ENTERTAINMENT LLC.

©2018 Dougley Games and Entertainment LLC. PO Box 333, Gladys, VA 24554-0333 USA.

All other original material in this work is copyright 2018 by Will Mayer and published under the community content agreement for Dungeon Masters Guild.

THANKS TO ZEEKO FOR THE READ-ALOUD DESCRIPTIVE TEXT BOX FORMAT.

ART CREDITS:

All art: Matze Katze (matze2001 on Deviant Art) Under CC3 License https://creativecommons.org/licenses/by/3.0/legalcode

IF YOU LIKE THIS BOOK, SUPPORT OUR OTHER PROJECTS:

- OTHER DM'S GUILD TITLES BY WILL MAYER
- LISTEN TO D8 NIGHT: AN ACTUALPLAY PODCAST WWW.D8NIGHTPODCAST.COM OR WHEREVER YOU LISTEN TO PODCASTS
- Follow us on Twitter or Facebook @d8nightpodcast
- REVIEW/RATE MY DM'S GUILD TITLES OR OUR SHOW!

MAKING FRIENDS

Xanthar's Guide to Everything offers a quick and easy way to create a homunculus with statistics that can be found in the Monster Manual. It's a simple 6th level spell with somewhat expensive material components, but all in all, the process is quick, easy, and predictable. Those rules are perfect for the character who thinks of the homunculus as an afterthought, a nicety, or a convenience. But for the Wizard, Warlock, or other student of the arcane that wants a homunculus that is truly an extension of herself, or for the DM who wants the construction of such a creature to be a true experience for his players, there is room for a more complex set of rules.

Blood, Sweat, and Tears seeks to flesh out the process behind the construction of a homunculus. It allows for customization, while also requiring the kind of patience and dedication that is generally necessary for the creation of such creatures throughout the canon of great horror and science fiction.

HUMORS

MOST ARCANISTS BELIEVE THAT BLOOD IS enough to imbue a homunculus with the lifeforce it needs to thrive, but man is not purely sanguine and neither is a truly viable homunculus.

-The Six Humors of the Homunculus

A homunculus is a creature of many parts. What begins as a rudimentary sculpture of inert clay mixed with bones or hair eventually becomes an arcane construct that embodies some of the very essence of its creator.

This essence or life force is passed from the creator to the homunculus by imbuing it with its humors: yellow bile, sweat, blood, tears, black bile, and phlegm. The precise mixture of these humors delivered during a rigid, month-long arcane ritual, creates the various temperaments, personality traits, and special abilities of homunculi.

A homunculus too full of any one humor will often fail to mature or have a temperament too extreme to be of any use, while a homunculus with a careful balance of humors can be a arcanist's truest and most useful companion.

Understanding these humors and the way they must be delivered to the homunculus is necessary before beginning the ritual. The ritual is described in full in the magic book *The Six Humors of the Homunculus*. If a creature attempts to perform the ritual without access to the book, it will need to succeed on a DC 25 Intelligence (Arcana) check each time it delivers a humor or it fails to imbue the humor and must wait 24 hours before attempting to do so again.

The Six Humors of the Homunculus

Wondrous item, very rare (requires attunement by a spellcaster)

This tome contains information about the various rituals required to create a homunculus. If you spend 48 hours over a period of 6 days or fewer studying the book's contents and practicing the rituals it contains, you learn the imbue humor spell (see sidebar).

You also learn the material components needed to complete the ritual, the six humors that can be used during the ritual, and the temperament each humor is associated with.

Once you gain knowledge from this book, the tome loses its magic, but regains it in a century.

Spell: Imbue Humor

2nd level transmutation (ritual)

Casting Time: 10 minutes **Range:** 5 feet

lasts until the next dusk.

Components: V, S, M (clay, mandrake root, bones or hair, a drop of the desired humor and a jewel encrusted bowl worth at least 1,000 gp). **Duration:** Instantaneous

You place the homunculus in the jewel encrusted bowl along with a drop of the desired humor, imbuing it with the power of that humor. You immediately take 2d4 necrotic damage that can't be reduced in any way and your maximum hit points are reduced by the same amount. The effect

This spell can only be performed during the ritual you initiate to create a new homunculus or mature an existing one. When maturing an existing one, the material components no longer require clay, mandrake root, and hair or bone.

TABLES

Ability Table:

d6	Ability	Temperament	Personality Traits	Humor	Gem
1	STR	Choleric	Vengeful, Passionate	Yellow Bile	Citrine
2	DEX	Reactive	Adaptable, Mimetic	Sweat	Diamond
3	CON	Sanguine	Happy, Affectionate	Blood	Ruby
4	INT	Supine	Submissive, Needs	Tears	Opal
1	* * *		Affirmation	A MARCE MARCH	and the second
5	WIS	Melancholic	Cautious,	Black Bile	Onyx
			Thoughtful		
6	CHA	Phlegmatic	Peaceful,	Phlegm	Emerald
			Sympathetic	and the states	

Temperament Table:

Temperament (Feature)	Adolescent Effect	Mature Effect	Mastery Effect
Choleric (Vengeance)	Improved Bite: The damage die for the homunculus' bite attack increases to a d6.	Multiattack : When it takes an attack action its turn, the homunculus can attack once with its bite and once with its claws.	Vengeful Strike: When a creature within 5 feet of the homunculus makes an attack against you, the homunculus can use its reaction to make a claw attack against the attacking creature.
Reactive (Transformation)	False Form: Choose a Tiny Beast with a CR of 0. The homunculus can use a bonus action to change in and out of a form resembling this creature. It gains all of the creature's attributes but retains its alignment and remains a Construct.	Additional Forms: You can add two additional forms of your choice to the forms your homunculus can take. You must choose Tiny Beasts with a CR of 0.	True Form: Choose a Small or Tiny beast with a CR of 1/8. Your homunculus can use a bonus action to polymorph into that creature. Add your proficiency bonus to its AC and Attack Rolls while in this form. Once it uses this effect, it cannot do again until the next dusk.
Sanguine (Bolstered)	Flight: The homunculus gains a flying speed of 20.	Bolster: If the homunculus is within 5 feet of a creature, it can use a bonus action to bolster the spirits of that creature, granting it 1d4 temporary hit points until the start of the homunculus' next turn.	Improved Flight: The homunculus gains a flying speed of 40. While flying, the homunculus does not provoke opportunity attacks.

Supine (Subservience)

Melancholic (Perception)

Phlegmatic

(Empathy)

Helpful: You can expend a bonus action, rather than an action, to issue a command to your Homunculus to perform a Help action. Keep Watch: While you are resting, the homunculus has advantage on all Wisdom (Perception) checks while it is within 150 feet of you.

Improved Telepathy:

to one mile.

Your telepathic bond with

your homunculus extends

Selfless: You can use a free action, rather than a bonus action, to issue a command to your Homunculus to perform a Help action.

Vigilant: While the homunculus is within 60 feet of you, you cannot be surprised.

Unbreakable Telepathy:

Your telepathic bond with

your homunculus is present so long as you

are on the same plane.

Complete Subservience: You can use a free action, rather than an action, to telepathically issue any command to your Homunculus.

Innate Casting: You can teach your homunculus one first level spell that you know. The homunculus can cast this spell once without the need for material components and regains the ability to do so again at dusk.

Empathetic Bond: When you or your homunculus take damage, you can choose to split the damage instead.

THE RITUALS

EVERYONE IS SO INTERESTED IN FINDING THE easy way to do things. You want a potion that makes you smarter for a minute instead of studying to gain lasting knowledge. When it comes time to find a familiar, you just want to cast a spell and be done with it. That's all well and good if you need something fast, but if you want an arcane companion that will last a lifetime —a true homunculus— you simply can't skimp on the ritual.

-Krinkle Firetouch, Corn Smart

The ritual to create a homunculus is simple. All it requires is a mandrake root, a bit of bones or hair, clay, a drop of blood, a bowl encrusted with the jewels that represent each humor, and access to the *imbue humor* spell. When the root, the bones, the clay, and the blood are mixed in the bowl and the spell is cast, a homunculus is born. Then, the truly taxing portion of the ritual begins.

The Larval Homunculus

A homunculus that has not been imbued over time with the humors of its maker is but a shell of what it can truly become. It has limited vitality and can only be awake from dusk until midnight.

What to Expect When You're Expecting a Homunculus

So you've put a little of yourself in a bowl, spoken the ritual, and created a homunculus. You think you're done, but your work has just begun.

Raising a homunculus takes something out of you. Its life force is not entirely its own, but rather an extension of yours. As the homunculus grows stronger, you may feel groggy or lightheaded, experience dehydration, or develop dusk sickness.

But when the process is complete and you have a fully formed construct of clay, hair, and bodily fluids looking back at you, sharing your innermost thoughts, you'll know it was all worthwhile.

Its abilities are extremely underdeveloped and it does not yet possess the knowledge of its maker. It appears like an unformed lump of clay and hair or bone, sprouting only the most diminutive of arms and legs during its waking hours.

If a larval homunculus is reduced to o hit points, it dies.

Homunculus, Larva Stage

Tiny construct, neutral

Armor Class 8

Hit Points 1 (1d4-4) Speed 10 ft.

STR	DEX	CON	INT	WIS	CHA
2 (-4)	2 (-4)	2 (-4)	2 (-4)	2 (-4)	2 (-4)

Damage Immunities Poison

Condition Immunities Charmed, Poisoned Senses Darkvision 60 ft., passive Perception 6 Languages Understands the Languages Of Its Creator But Can't Speak Challenge 0 (10 XP)

Telepathic Bond. While the homunculus is within 120 feet of its master, it can magically convey what it senses to its master, and the two can communicate telepathically.

Limited Vitality. Until it reaches adolescence, the homunculus can only be active from dusk till midnight.

ACTIONS

Bite. Melee Weapon Attack: +0 to hit, reach 5 ft., one creature. Hit: 1 piercing damage.

MATURING THE HOMUNCULUS

Maturing a homunculus from larval form into adolescence requires dedication, fortitude, and quite of a bit of yourself, causing most homunculi to never reach maturity. The process begins at the first new moon following the creation of the homunculus and continues for 30 days. Each day, you imbue the creature with a humor from your own body, adding characteristics to the construct with each passing day.

Once per day, around dusk when the homunculus larva comes to life, you perform the ritual, carefully choosing the desired humor. (You or your DM should keep a tally of the humors imbued into your homunculus as they will affect its adolescent form). See the ability table for a list of humors and their associated ability scores.

If you fail to perform the ritual every day during the 30 day process, the ritual fails. If you imbue the same humor more than once within 72 hours, roll a d10. On a 1, the ritual fails. If the ritual fails, you may attempt it again after the next new moon.



THE ADOLESCENT HOMUNCULUS

If the ritual is successful over the course of 30 days, the larva reaches adolescence and the final day's spell consumes one of the gems from the ritual bowl (see the ability table to determine which gem is consumed. The gem must be replaced before the bowl can be used again as a material component for the spell).

The homunculus gains the full knowledge of its maker. It also obtains the full force of its vitality and is no longer limited to being awake between the hours of dusk and midnight. It reshapes itself into a creature resembling a small humanoid about the size of a squirrel.

At this stage, the homunculus also gains additional hit points, hit dice, an improved attack, a new AC, new ability scores, saving throw proficiencies, a personality, a temperament, and a feature based on the humors imbued into it during the ritual.

Ability Scores: For each humor delivered during the ritual, increase the associated ability score (see the ability table) of the larval homunculus by 1 to a maximum of 20. For example, if you imbued the homunculus 6 times with sweat, its Dexterity score would increase from 2 to 8.

Speed: The adolescent homunculus has a base walking speed of 20.

Temperament and Personality: Once you have determined the ability scores for the homunculus, refer to the ability table. The highest ability score of the homunculus determines its primary temperament and suggested personality traits. If more than one ability score is tied as the highest, you may choose which of them you wish to use determine the primary temperament of your homunculus.

Adolescent Effect: The homunculus gains access to the adolescent effect of its primary temperament (see temperament table).

Saving Throw Proficiencies: The homunculus is proficient with the saving throws associated with its two highest abilities. In the case of a tie, you may choose which saving throws it is proficient with from among tied ability scores.

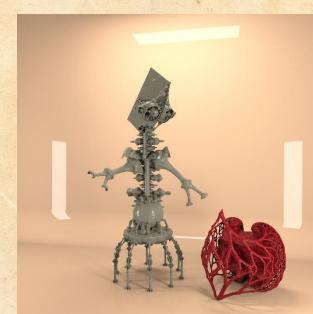
Improved attack: The homunculus adds its Strength modifier and your proficiency bonus to its attack rolls. Its bite attack deals piercing damage equal to 1d4 + its Strength modifier.

Natural Armor: The homunculus' AC is equal to 10 + its Dexterity modifier (minimum 8).

Hit Points and Hit Dice: An adolescent homunculus has a hit point maximum equal to the maximum number you can roll on a single hit die + its Constitution modifier. It has 1 hit die of the same type associated with your class (your highest hit die if you are multiclassing) and it can roll this hit die whenever it takes a short rest. The homunculus can only be healed in this manner and it cannot have its maximum hit points reduced or increased in any way.

Tracking Stats:

A homunculus is a complex creature. Even though it is an extension of yourself, its ability and skills are all its own. Consider tracking it on its own character sheet. When it rolls its hit dice, you take damage equal to the die roll and your maximum hit points are reduced by the same amount until the next dusk.



THE MATURE HOMUNCULUS

When you reach 11th level, you can perform a ritual to mature your homunculus over the period of 7 days. The ritual follows the same steps as the ritual to bring your homunculus to adolescence. If it fails, the homunculus does not mature and you can attempt the ritual again after 30 days.

A mature homunculus has increased ability scores, gains a skill proficiency, develops a second attack option, gains hit points and hit dice, potentially develops a secondary temperament, and gains effects based on its temperament.

Ability Scores: For each humor delivered during the 7 day ritual, increase the associated ability score (see the ability table) of the adolescent homunculus by 1 to a maximum of 20.

Speed: The mature homunculus' base walking speed increases to 25.

Secondary Temperament: The homunculus gains a secondary temperament if at least one other ability score is within 2 points of the ability score associated with the homunculus' primary temperament (or if one is greater than the ability score associated with the homunculus' primary temperament).

Adding mystery to the rituals

As a DM, you may want to keep some elements of surprise within the rituals used to create a homunculus. In many of the greatest stories of creation of such constructs, the creators only learn the true nature of their creations after the process has been completed.

If the mystery of the homunculus is what you are after, keep the tables, effects, and true nature of how the temperaments effect abilities to yourself until they start to manifest in the adolescent homunculus. Alternatively, you can set a dc and have the player roll Intelligence (Arcana) checks to see what they know about the potential outcomes. On successful checks, you can pass out some of the information as you see fit.

If you'd rather your player have the ability to choose the type of homunculus they desire, consider providing them access to this supplement after they have finished studying *The Six Humors of the Homunculus*.

The secondary temperament is determined by the highest ability score (other than the one used to determine the primary temperament), as shown in the ability table. If there is a tie, you can choose which temperament becomes its secondary temperament. Gaining a secondary temperament allows the homunculus access to the adolescent feature associated with it when it chooses to exhibit that temperament.

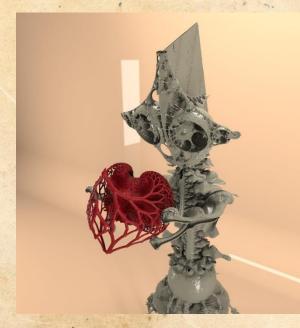
A homunculus can exhibit only one temperament at a time. It can change between temperaments as a bonus action. It can do so twice and regains expended uses when it finishes a short rest.

Mature Effect: The homunculus gains access to the mature effect of its primary temperament.

Hit Points and Hit Dice: The homunculus increases its hit point maximum to the maximum number you can roll on two hit dice + 2 times its Constitution modifier. It now has 2 hit dice of the same type associated with your class (your highest hit die if you are multiclassing).

Claw Attack: The homunculus may choose to make a Claw attack instead of a bite whenever it makes an attack. Its claw attack deals slashing damage equal to 1d6 + its Strength modifier.

Skill Proficiency: Choose 1 skill you are proficient with. The homunculus can now add your proficiency bonus to checks made using those that skill.



THE ELDER HOMUNCULUS

When you reach 17th level, you can perform a ritual to mature your homunculus one last time, over the period of 7 days, to the form of an elder homunculus. The ritual follows the same steps as the ritual to bring your homunculus to adolescence and maturity. If it fails, the homunculus does not mature and you can attempt the ritual again after 30 days.

An elder homunculus has increased ability scores, improved saving throws, increased hit points, and hit dice, a new claw attack option, and it a develops a mastery effect for its temperament or the ability to change between two temperaments at will.

Ability Scores: For each humor delivered during the 7 day ritual, increase the associated ability score (see the ability table) of the mature homunculus by 1 to a maximum of 20.

Skill Proficiencies: Choose 2 skills you are proficient with. The homunculus can now add

your proficiency bonus to checks made using those 2 skills.

Improved Secondary Temperament: If the homunculus developed a secondary temperament when it became mature, it gains access to the temperament's mature effect when it chooses to exhibit that temperament.

An Elder homunculus can still exhibit only one temperament at a time and can change between temperaments as a bonus action, but it can now do so at will instead of twice between short rests.

Mastery Effect: If the homunculus did not develop a secondary temperament when it became mature, it receives the mastery effect associated with its primary temperament from the temperament table.

Hit Points and Hit Dice: The homunculus increases its hit point maximum to the maximum number you can roll on three hit dice + 3 times its Constitution modifier. It now has 3 hit dice of the same type associated with your class (your highest hit die if you are multiclassing).

Roleplaying a Homunculus

If you are DMing a campaign where you allow a player to create his/her own homunculus, you may want to roleplay the interactions the player has with the construct.

Each homunculus is unique, and though they are a construct that is willing to obey commands, they are still a temperamental, feeling being.

Consider using the traits associated with the homunculus' temperament to flesh out its personality.

For example, a sanguine homunculus may be prone to flitting around its maker and trying to nuzzle against it as it flies past. A melancholic one on the other hand, might be lethargic and cautious, always glancing around and delivering pessimistic telepathic messages to its creator about what ills might lie around the next corner of the dungeon.

YOUR FAITHFUL COMPANION -

FOR LIFE

IT'S NOT EASY TO MAKE A FRIEND, BUT AT LEAST so far as homunculi are concerned, it's easy to keep one.

-Wysdom Beezlebeck The Lonely Warlock

Once you have matured your homunculus to adolescence and beyond, you have made a true friend, one that will be with you on all of your travels throughout the planes. But the homunculus is more than just a friend. It is also an extremely valuable asset when researching, adventuring, and traveling. This section provides some clarification on how the homunculus functions in combat and other in game situations.



Commands

The homunculus obeys your commands as best as it can. It takes its turn on your initiative, though it doesn't take an action unless you command it to. On your turn, you can telepathically command the homunculus where to move (no action required by you). You can use your action to telepathically command it to take the Attack, Dash, Disengage, Dodge, or Help action. If you have the Extra Attack feature, you can make one weapon attack yourself when you command the homunculus to take the Attack action.

If you are incapacitated or sleeping, the homunculus acts on its own, focusing on protecting you and itself. The homunculus never requires you command it to use its reaction, such as when making an opportunity attack.

DORMANCY

You can use an action to place the homunculus inside the jewel encrusted bowl you used to create it, speak a command word, and render it dormant. A dormant homunculus cannot perform any actions and is unaware of its surroundings. Rendering a homunculus dormant allows you to carry it without it being subjected to damage from spells, as if it was an inanimate object you were wearing or carrying. It still regains hit dice and abilities at dusk, even if it is dormant when dusk settles. To awaken a dormant homunculus, you can cast *imbue humor*. The homunculus gains no ability score increases as a result of this casting. It returns to its awakened state with the number of hit points it had when it became dormant (minimum 1).

ITEMS AND ARMOR

Unless your DM specifies otherwise, your homunculus cannot benefit from wearing armor, wielding weapons, or using magic items.

DOWNTIME AND QUESTS

You can send the homunculus on quests to retrieve items, deliver messages, or clear rats out of the basement. If the homunculus leaves your telepathic range, it does its best to complete the quest and return.

If you are performing an activity like research during your downtime and the homunculus remains nearby, it can assist you by using its Help action, granting you advantage on certain checks as it provides an extra set of hands or an extra pair of eyes.

HEALING AND DEATH

Since the homunculus does not require sleep, it gains no benefits from a long rest. Its expended hit dice and any other temperament specific abilities that it possesses that can be expended always recharge at dusk. If you are playing in a setting that does not have a traditional dusk and dawn cycle, choose a time of day to substitute for dusk.

The homunculus can only be healed by rolling its hit dice on a short rest and it cannot have its maximum hit points reduced or increased in any way. When it rolls its hit dice, you take damage equal to the die roll and your maximum hit points are reduced by the same amount until the next dusk.

If the homunculus is outside of the telepathic range of its master, the DM decides when the homunculus can roll hit dice, reducing the hit points of its master when it does. If the homunculus is within telepathic range of its master, its master decides when it can roll hit dice.

Once a homunculus outgrows its larval state, it only dies if its master dies or if the master creates a new homunculus. If an adolescent, mature, or elder homunculus is reduced to o hit points, it becomes a dormant and appears like a lump of clay. When the next dusk falls, the homunculus regains 1 hit point and reanimates.

ADDITIONAL

CUSTOMIZATION

Your DM may allow you to customize the appearance of your homunculus as it ages based on its temperament, experiences, or personality.

The following options also may be applied at your DM's discretion: Ability score increases and Feats. Adding these options changes the rarity of *The Six Humors of the Homunculus* from very rare to legendary.

ABILITY SCORE INCREASE

When you reach 4th level, and again at 8th, 12th, 16th, and 19th level, you can increase one ability score of your homunculus by 1. You can't increase an ability score above 20 using this feature.



Homunculus Feats

In place of an ability score increase, you can choose one of the following feats for your homunculus:

ARCHOMECHANICAL MIND

The homunculus can accurately recall anything it has seen or heard within the past month.

CLIMBER

The homunculus gains a climb speed of 20.

CONSTRUCT'S CONSISTENCEY

Whenever the homunculus rolls a d20 it can choose to automatically roll a 10 instead. It must choose to do so before it rolls.

DURABLE

The homunculus' maximum hit points increase by 5. You can select this feat multiple times and increase the homunculus' maximum hit points by 5 each time.

POISON BITE

A target hit by the homunculus' bite attack must succeed on a dc 10 constitution saving throw or be poisoned for 1 minute. You can select this feat a second time to increase the dc of the saving throw to 14 and a third time to increase the dc of the saving throw to 16.

SKILLED

The homunculus can add your proficiency bonus to a skill of your choice. You can select this feat multiple times to add additional skills.

SWIMMER

The homunculus gains a swim speed of 20.

TELEPATHIC SPELL SCULPTING

When you cast a spell that would affect the homunculus, you can choose to allow the homunculus to automatically succeed on its saving throw against that spell and take no damage if it would otherwise normally take half damage on a successful save.